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FORENSIC TESTING PROGRAM

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Latent Print Processing
Test No. 19-5190 Summary Report

Each sample pack contained three pieces of simulated crime scene evidence. Participants were asked to process each piece for latent fingerprints and report their findings. Data were returned from 270 participants and are compiled into the following tables:

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

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

Manufacturer's Information

Each sample pack consisted of three items of simulated crime scene evidence. Each item was divided into labeled sections/pieces and contained one latent fingerprint. The items consisted of a notice on a piece of white copy paper (Item 1), several segments of grey duct tape (Item 2), and several metal roofing discs (Item 3). Participants were asked to process each item for latent fingerprints, utilizing the method(s) deemed most appropriate for the substrate being examined.

SAMPLE PREPARATION-

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

SAMPLE PACK ASSEMBLY-

Each item was packed into its pre-labeled item envelope(s) with necessary protective materials. Following predistribution testing, each item envelope was sealed with evidence tape and initialed with "CTS". These were then placed into a sample pack box and sealed with packaging tape.

VERIFICATION-

A random selection of prepared test items were processed in-house for latent prints to verify their durability. Ridge detail was successfully developed on all samples of all three items, with the print being found in the expected section of each item. Predistribution examiners were able to recover ridge detail on all three items. One of these three labs reported recovery in a section that differed from expected results; requests for photographs of this recovery were not fulfilled. Based on the consistency and success of development by the other two labs and in-house testing, this item was approved for inclusion in the test.

Item No.	Test Material	Enhancer	Print Location	Pattern
1	white copy paper	acid	D	Arch
2	grey duct tape	oil	D	Arch
3	metal roofing discs	oil	B	Loop

Summary Comments

Each sample pack contained three items of evidence to be processed for latent prints: a white copy paper notice (Item 1), several pieces of grey duct tape (Item 2), and four metal roofing discs (Item 3). Each item was divided into four sections or pieces, which were labeled with the letters A-D. Participants were asked to determine in which of the four sections of each evidence item a latent print was contained. (Refer to the Manufacturer's Information for preparation details).

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

Of the 270 participants, 173 (64%) were able to successfully recover a print in the expected section for all three items, and a consensus threshold was reached on each individual item. For Item 1, 194 of 267 responding participants reported section "D" (73%). Sixty-six participants reported "None." Outliers in this group included four participants who reported other sections (1 in "A", 2 in "B", 1 in "C") and three participants who gave responses incongruent with the requested reporting method ("-", "N/A"). Three participants did not respond for this item. For Item 2, 238 of 267 responding participants (89%) were successful in locating the print in section "D". Nineteen participants reported "None." Outliers in this group included three participants who reported other sections (1 in "A", 1 in "B", 1 in "C") and seven participants who gave responses incongruent with the requested reporting method ("-", "N/A", "Y"). Three participants did not respond for this item. For Item 3, 261 of 270 responding participants (97%) located the print in section "B". Five participants reported "None." Outliers in this group included one participant who reported another section ("C") and three participants who gave responses incongruent with the requested reporting method ("-", "N/A", "Y").

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

A majority of participants began their analysis with some type of nondestructive visual examination or alternate light source analysis prior to conducting development techniques on each item. Photography was the predominantly utilized preservation method across all three items, but was often used in conjunction with lifting and/or scanning, dependent upon the surface.

For print development on the paper notice (Item 1), participants primarily utilized porous development methods to recover the latent print; this included predominantly Ninhydrin (reported 230 times), as well as 1,2-Indanedione (81), Physical Developer (58), and DFO (57). these methods were often used sequentially to increase likelihood of fingerprint recovery. For print development on the duct tape (Item 2), a majority of participants used some type of Wet Powder Suspension (reported 218 times). Although not required, some participants elected to process the non-adhesive side of the item with Cyanoacrylate Fuming (80) and a Dye Stain (63). For development of prints on the roofing discs (Item 3), participants mainly used Cyanoacrylate Fuming (reported 236 times). This was commonly followed by the use of a Dye Stain (156) and/or Powder Dusting (133) for ridge detail enhancement. Methodology selection and sequencing was

Summary Comments, continued

generally similar across all participants with expected small variances due to individual laboratory protocols.

The section on First Level Detail Findings was updated in this test to better reflect the reporting style for those participants who perform pattern analysis. Participants were able to call more than one pattern as a possibility based on the ridge detail developed. As such, there was more variation in reporting than in previous test cycles. Some participants do not perform print pattern analysis in their routine casework and reported "N/A" to the pattern type question; therefore, no consensus is established for any of the items. For those who identified pattern types, the most common responses for each item were: Item 1 – Arch; Item 2 – Arch; Item 3 – Loop. The most frequent response for each item corresponds to the expected results for pattern reporting. Items 1 and 2 were also commonly called to a loop, based on limited ridge detail information.

In an ongoing effort to ensure participants are successful in the recovery of ridge detail on all items, CTS will be making an adjustment to significantly shorten the time between manufacture and shipment. Additionally, item packaging alternatives are being researched to reduce environmental effects on the latent prints. These adjustments are made following several cycles of testing where many participants were unable to recover ridge detail of value on porous materials.

Print Location

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
239ENG	D	49ZP9K	None	7FLBNN	D
26ZBDB	D	4AM3FN	D	7LUTPF	None
28T3R3	None	4APPW3	D	7P98WG	D
28UHV8	None	4HWDLU	D	7PP9WX	D
2BAMCW	D	4KB2JT	D	7R2VGX	D
2KCPU9	N/A	4QUHUH	None	7XMT6K	None
2T6MCM	D	4RRAUQ	1D	839ARU	D
2UF84Q	None	4UV3L4	D	83E4PN	D
2W77JA	None	629FZT	D	8B6ZGC	D
2WP89X	D	63PT3P	D	8DXW76	D
2ZPQJP	D	6BZADW	D	8DZ8WM	D
39TWFX	D	6FLQNF	D	8LA4NU	D
3DU74Y	D	6MUQ3W	None	8REWUJ	D
3KCRYN	D	6TVK4Y	D	8UMKDZ	None
3T3U2E	D	6WW8YN	None	8WRRJT	None
3UV9HH	None	6XPGTP	D	8WT74L	D
3UWHLV	D	6XU4EQ	D	8X4RTM	D
3XFF8Z	D	6YQH7P	D	983NTP	D
3ZK69N	D	6ZW4FN	D	987M9X	None
473XWT	D	73EDUL	N/A	9DVGFQ	D
49ZML2	D	76LDCL	D	9FWRZT	D

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
9HQWWR	D	C2A6HB	D	EMV3Z6	None
9JXVUZ	D	C47AWB	D	EP3KY2	D
9U36XX	D	C4BP9B	D	EWNDCL	D
ABJ7U8	D	C7X9CU	D	EZNP9L	D
AFRU6M	D	C88VKD	D	F3MZGC	D
AG7WEG	D	CA4KGB	D	F9UVF9	D
AJWNJD	D	CFNP63	D	FG83XX	D
ALGAVF	None	CJM3TU	D	FP28QY	D
AN7KQE	D	CPAVWG	D	FRTMGF	None
ANLYYN	D	CQ9GTY	D	FWHKRJ	D
APZ6Y6	D	CYXQXH	D	G4XLN8	None
AR8J8Y	D	D3FN36	None	G73WD2	D
AY6E2Q	D	D62QQP	D	G8EC82	None
B2P7LD	D	D8RRWD	B	GBDAJ9	B
B2QU9H	None	DHMMQG	D	GHELE7	None
B3LGPT	D	DJKN2E	D	GLBBVD	D
B3LJCC	D	DKVPND	D	GMRXDD	D
B6N4WK	D	DPM2GP	None	GR7FUU	None
B7GRJM	D	DQHM4N	D	GWWQ38	D
B9QTL7	D	DWQ4LP	D	H6N8WN	D
BQNHTF	None	E6GQ9E	D	H9PTLR	None
BWHUX8	D	EEK47U	D	HAJH4M	D

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
HDF948	D	KQKHZE	D	MR6RU6	None
HDGFHF	D	KXCZ7B	D	MV3DKM	None
HTUQ8M	None	KZK7RC	None	MYHA87	-
HUK84G	D	L2UKQ6	None	MYJWUC	D
HUPUWA	None	L83VQC	D	MZVX8X	None
HVD6BN	D	LFFDFH	D	N3YNGY	D
HVKFJ9	None	LG8TQ9	None	NAZ2EG	D
J2NY3J	None	LJAX29	D	NCMM6H	D
J6Z9BB	D	LM96M7	D	NFLX2H	D
JB8U3E	None	LMFVTA	None	NJJMF6	D
JCF28R	D	LPGG68	D	NKDBWE	D
JDWECA	D	LPZ43P	D	NZ9P3Z	D
JDXV92	None	LWLH2A	D	P2NU8W	None
JEM82F	D	LZKZY2	D	P63M4G	None
JHRBU9	None	M27L7C	D	P7BAMB	D
JLPWH6	D	M3LFP4	None	PECPPH	None
JU2PF2	D	M6B4CK	D	PKA6WW	D
K4HWRV	None	M7KUB9	D	PKEHH8	None
K4KJ7N	D	MEWXG8	None	PLNBA7	D
K6DFTV	D	MLD2BA	C	PM8UHJ	None
KE6P6D	None	MPCEWE	D	PNB7YE	D
KEKYA8	D	MQPE79	D	PNFB93	D

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
PP7RR7	D	UDG6GY	None	WEMJB6	D
PQD9KA	D	UEBAY8	D	WLQ7Y6	None
PQJJGF	D	UKDH6Z	D	WR7DF4	None
PQZF7U	D	UM2QU4	None	WUZKXZ	D
Q6YUTA	D	UNWD9R	D	WVALJY	D
QAPDMD	D	UR3PC9	D	WY9KWR	D
QDRDHW	None	URHD89	D	WZL8CJ	D
QVWCG8	D	UU4FCE	None	XFALAP	D
QXXM6U	None	UUL4F9	D	XK83P6	D
QYMXX9	D	UULCV2	D	XXG2TQ	D
R37679	A	UWC6LW	D	XYQNBJ	D
RA88YR	None	UXLWTT	D	Y2TMX3	D
RGALXV	None	VDCLY9	D	Y339GW	D
RRPPUT	D	VDYRLU	D	Y3JXPV	D
T9PV3M	D	VMZGW4	None	YEEKNY	D
TAJHFQ	D	VUJD87	None	YJMWN7	D
TCRN4D	D	VUZBCV	D	YK7JMN	D
THG7F4	None	VVVXNY	None	Z3GR2T	D
TKKWN4	D	VWP9JV	D	Z3V97U	D
TXU83Y	D	VZLRPZ	None	Z4B4R8	None
U4W72A	D	W86QW7	D	Z94CTT	None
U6JUBP	D	WCELJA	D	ZA2ZGD	D

TABLE 1 - Item 1

WebCode	Location	WebCode	Location	WebCode	Location
ZAWK2R	D				
ZEVW74	D				
ZJL7F3	D				
ZLAKXK	D				
ZMMCTM	None				
ZQ3Y7R	D				

Response Summary Total Participants: 270

Location	Total
A	1
B	2
C	1
D	194
None	66

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
239ENG	D	4AM3FN	D	7P98WG	D
26ZBDB	None	4APPW3	None	7PP9WX	D
28T3R3	None	4HWDLU	D	7R2VGX	D
28UHV8	None	4KB2JT	D	7XMT6K	D
2BAMCW	None	4QUHUH	D	839ARU	D
2KCPU9	D	4RRAUQ	2D	83E4PN	D
2T6MCM	D	4UV3L4	D	8B6ZGC	D
2UF84Q	D	629FZT	D	8DXW76	D
2W77JA	D	63PT3P	D	8DZ8WM	D
2WP89X	D	6BZADW	D	8LA4NU	D
2ZPQJP	D	6FLQNF	B	8REWUJ	D
39TWFX	D	6MUQ3W	D	8UMKDZ	D
3DU74Y	D	6TVK4Y	D	8WRRJT	D
3KCRYN	D	6WW8YN	None	8WT74L	D
3T3U2E	D	6XPGTP	D	8X4RTM	A
3UV9HH	D	6XU4EQ	D	983NTP	D
3UWHLV	D	6YQH7P	D	987M9X	D
3XFF8Z	D	6ZW4FN	D	9DVGFQ	D
3ZK69N	D	73EDUL	D	9FWRZT	D
473XWT	D	76LDCL	D	9HQWWR	D
49ZML2	D	7FLBNN	D	9JXVUZ	None
49ZP9K	D	7LUTPF	D	9U36XX	D

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
ABJ7U8	D	C7X9CU	D	EZNP9L	N/A
AFRU6M	D	C88VKD	D	F9UVF9	D
AG7WEG	D	CA4KGB	D	FG83XX	D
AJWNJD	D	CFNP63	D	FP28QY	D
ALGAVF	D	CJM3TU	D	FRTMGF	D
AN7KQE	D	CPAVWG	D	FWHKRJ	D
ANLYYN	D	CQ9GTY	D	G4XLN8	D
APZ6Y6	D	CYXQXH	D	G73WD2	D
AR8J8Y	D	D3FN36	None	G8EC82	D
AY6E2Q	D	D62QQP	D	GBDAJ9	D
B2P7LD	D	D8RRWD	D	GHELE7	D
B2QU9H	D	DHMMQG	D	GLBBVD	D
B3LGPT	D	DJKN2E	D	GMRXDD	D
B3LJCC	D	DKVPND	D	GR7FUU	D
B6N4WK	D	DPM2GP	D	GWWQ38	D
B7GRJM	D	DQHM4N	D	H6N8WN	D
B9QTL7	D	DWQ4LP	None	H9PTLR	D
BQNHTF	D	E6GQ9E	D	HAJH4M	D
BWHUX8	D	EEK47U	D	HDF948	D
C2A6HB	D	EMV3Z6	D	HDGFHF	D
C47AWB	D	EP3KY2	D	HTUQ8M	D
C4BP9B	D	EWNDCL	N/A	HUK84G	D

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
HUPUWA	D	L83VQC	D	MYJWUC	D
HVD6BN	D	LFFDFH	D	MZVX8X	D
HVKFJ9	D	LG8TQ9	D	N3YNGY	D
J2NY3J	D	LJAX29	D	NAZ2EG	D
J6Z9BB	D	LM96M7	D	NCMM6H	D
JB8U3E	D	LMFVTA	D	NFLX2H	D
JCF28R	None	LPGG68	D	NJJMF6	D
JDWECA	D	LPZ43P	D	NKDBWE	D
JDXV92	D	LWLH2A	D	NZ9P3Z	D
JEM82F	D	LZKZY2	D	P2NU8W	D
JHRBU9	D	M27L7C	D	P63M4G	D
JLPWH6	D	M3LFP4	None	P7BAMB	D
JU2PF2	D	M6B4CK	D	PECPPH	D
K4HWRV	D	M7KUB9	D	PKA6WW	D
K4KJ7N	D	MCQ3K6	D	PKEHH8	D
K6DFTV	D	MEWXG8	D	PLNBA7	D
KE6P6D	None	MLD2BA	D	PM8UHJ	D
KEKYA8	D	MPCEWE	N/A	PNB7YE	None
KQKHZE	D	MQPE79	D	PNFB93	None
KXCZ7B	D	MR6RU6	None	PP7RR7	D
KZK7RC	D	MV3DKM	None	PQD9KA	None
L2UKQ6	D	MYHA87	-	PQJJGF	D

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
PQZF7U	D	UM2QU4	D	WUZKXZ	D
Q6YUTA	D	UNWD9R	D	WVALJY	None
QAPDMD	D	UR3PC9	D	WY9KWR	D
QDRDHW	D	URHD89	D	WZL8CJ	D
QVWCG8	D	UU4FCE	D	XFALAP	D
QXXM6U	D	UUL4F9	D	XK83P6	D
QYMXX9	D	UULCV2	D	XXG2TQ	D
R37679	C	UWC6LW	D	XYQNBJ	D
RA88YR	D	UXLWTT	D	Y2TMX3	D
RGALXV	D	VDCLY9	D	Y339GW	D
RRPPUT	D	VDYRLU	D	Y3JXPV	D
T9PV3M	D	VMZGW4	D	YEEKNY	D
TAJHFQ	D	VUJD87	D	YJMWN7	D
TCRN4D	None	VUZBCV	D	YK7JMN	D
THG7F4	D	VVVXNY	D	Z3GR2T	D
TKKWN4	D	VWP9JV	D	Z3V97U	D
TXU83Y	D	VZLRPZ	Y	Z4B4R8	D
U4W72A	D	W86QW7	D	Z94CTT	D
U6JUBP	D	WCELJA	D	ZA2ZGD	D
UDG6GY	D	WEMJB6	N/A	ZAWK2R	D
UEBAY8	D	WLQ7Y6	D	ZEVW74	D
UKDH6Z	D	WR7DF4	D	ZJL7F3	N/A

TABLE 1 - Item 2

WebCode	Location	WebCode	Location	WebCode	Location
ZLAKXK	D				
ZMMCTM	D				
ZQ3Y7R	D				

Response Summary Total Participants: 270

Location	Total
A	1
B	1
C	1
D	238
None	19

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
239ENG	B	4AM3FN	B	7P98WG	B
26ZBDB	B	4APPW3	B	7PP9WX	B
28T3R3	B	4HWDLU	B	7R2VGX	B
28UHV8	B	4KB2JT	B	7XMT6K	B
2BAMCW	B	4QUHUH	B	839ARU	B
2KCPU9	N/A	4RRAUQ	3B	83E4PN	B
2T6MCM	B	4UV3L4	B	8B6ZGC	B
2UF84Q	B	629FZT	B	8DXW76	B
2W77JA	B	63PT3P	B	8DZ8WM	B
2WP89X	B	6BZADW	B	8LA4NU	B
2ZPQJP	B	6FLQNF	None	8REWUJ	B
39TWFX	B	6MUQ3W	B	8UMKDZ	B
3DU74Y	B	6TVK4Y	B	8WRRJT	B
3KCRYN	B	6WW8YN	B	8WT74L	B
3T3U2E	B	6XPGTP	B	8X4RTM	B
3UV9HH	B	6XU4EQ	B	983NTP	B
3UWHLV	B	6YQH7P	B	987M9X	B
3XFF8Z	B	6ZW4FN	B	9DVGFQ	B
3ZK69N	B	73EDUL	B	9FWRZT	B
473XWT	B	76LDCL	B	9HQWWR	B
49ZML2	B	7FLBNN	B	9JXVUZ	B
49ZP9K	B	7LUTPF	B	9U36XX	B

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
ABJ7U8	B	C7X9CU	B	EZNP9L	B
AFRU6M	B	C88VKD	B	F3MZGC	B
AG7WEG	B	CA4KGB	B	F9UVF9	B
AJWNJD	B	CFNP63	B	FG83XX	B
ALGAVF	B	CJM3TU	B	FP28QY	B
AN7KQE	B	CPAVWG	B	FRTMGF	B
ANLYYN	B	CQ9GTY	B	FWHKRJ	B
APZ6Y6	B	CYXQXH	B	G4XLN8	B
AR8J8Y	B	D3FN36	B	G73WD2	B
AY6E2Q	B	D62QQP	B	G8EC82	None
B2P7LD	B	D8RRWD	B	GBDAJ9	B
B2QU9H	B	DHMMQG	B	GHELE7	B
B3LGPT	B	DJKN2E	B	GLBBVD	B
B3LJCC	B	DKVPND	B	GMRXDD	B
B6N4WK	B	DPM2GP	B	GR7FUU	B
B7GRJM	B	DQHM4N	B	GWWQ38	B
B9QTL7	B	DWQ4LP	B	H6N8WN	B
BQNHTF	B	E6GQ9E	B	H9PTLR	B
BWHUX8	B	EEK47U	B	HAJH4M	B
C2A6HB	B	EMV3Z6	B	HDF948	B
C47AWB	B	EP3KY2	B	HDGFHF	B
C4BP9B	B	EWNDCL	B	HTUQ8M	B

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
HUK84G	B	L2UKQ6	B	MYHA87	C
HUPUWA	B	L83VQC	B	MYJWUC	B
HVD6BN	B	LFFDFH	B	MZVX8X	B
HVKFJ9	B	LG8TQ9	B	N3YNGY	B
J2NY3J	B	LJAX29	B	NAZ2EG	B
J6Z9BB	B	LM96M7	B	NCMM6H	B
JB8U3E	B	LMFVTA	B	NFLX2H	B
JCF28R	B	LPGG68	B	NJJMF6	B
JDWECA	B	LPZ43P	B	NKDBWE	B
JDXV92	B	LWLH2A	B	NZ9P3Z	B
JEM82F	B	LZKZY2	B	P2NU8W	B
JHRBU9	B	M27L7C	B	P63M4G	B
JLPWH6	B	M3LFP4	B	P7BAMB	B
JU2PF2	B	M6B4CK	B	PECPPH	B
K4HWRV	B	M7KUB9	B	PKA6WW	B
K4KJ7N	B	MCQ3K6	B	PKEHH8	B
K6DFTV	B	MEWXG8	B	PLNBA7	B
KE6P6D	B	MLD2BA	B	PM8UHJ	B
KEKYA8	-	MPCEWE	B	PNB7YE	B
KQKHZE	B	MQPE79	B	PNFB93	B
KXCZ7B	B	MR6RU6	B	PP7RR7	B
KZK7RC	3B	MV3DKM	B	PQD9KA	B

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
PQJJGF	B	UEBAY8	B	WLQ7Y6	B
PQZF7U	B	UKDH6Z	B	WR7DF4	B
Q6YUTA	B	UM2QU4	B	WUZKXZ	B
QAPDMD	B	UNWD9R	B	WVALJY	B
QDRDHW	None	UR3PC9	B	WVBDXU	B
QVWCG8	B	URHD89	B	WY9KWR	B
QXXM6U	B	UU4FCE	B	WZL8CJ	B
QYMXX9	B	UUL4F9	B	XFALAP	B
R37679	B	UULCV2	B	XK83P6	B
R9YQ9A	B	UWC6LW	B	XXG2TQ	B
RA88YR	B	UXLWTT	B	XYQNBJ	B
RGALXV	None	VDCLY9	B	Y2TMX3	B
RRPPUT	B	VDYRLU	B	Y339GW	None
T9PV3M	B	VMZGW4	B	Y3JXPV	B
TAJHFQ	B	VUJD87	B	YEEKNY	B
TCRN4D	B	VUZBCV	B	YJMWN7	B
THG7F4	B	VVVXNY	B	YK7JMN	B
TKKWN4	B	VWP9JV	B	Z3GR2T	B
TXU83Y	B	VZLRPZ	Y	Z3V97U	B
U4W72A	B	W86QW7	B	Z4B4R8	B
U6JUBP	B	WCELJA	B	Z94CTT	B
UDG6GY	B	WEMJB6	B	ZA2ZGD	B

TABLE 1 - Item 3

WebCode	Location	WebCode	Location	WebCode	Location
ZAWK2R	B				
ZEVW74	B				
ZJL7F3	B				
ZLAKXK	B				
ZMMCTM	B				
ZQ3Y7R	B				

Response Summary Total Participants: 270

Location	Total
A	0
B	261
C	1
D	0
None	5

Development Methods

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
239ENG	Visual Examination	Examined visually on 07/10/2019 - 1040 hours. No ridge detail was visible.
	Iodine	On 07/10/2019 - 1056 hours, evidence placed in a plastic bag with iodine crystals. The bag was sealed. Heat was applied to the crystals and they were agitated.
	Visual Examination	Examined on 07/10/2019 - approximately 1100 hours. No ridge detail was visible.
	Iodine	On 07/10/2019 - approximately 1101 hours, allowed to remain in bag with the iodine crystals for a better chemical reaction.
	Visual Examination	Examined on 07/10/2019 - 1120 hours. No ridge detail was visible.
	Iodine	On 07/10/2019 - approximately 1121 hours, heat was applied to the iodine crystals and they were agitated again.
	Visual Examination	Examined on 07/10/2019 - approximately 1124 hours. No ridge detail was visible.
	Iodine	On 07/10/2019 - 1145 hours, the evidence was processed using iodine crystals in a fuming wand.
	Visual Examination	Examined on 07/10/2019 - approximately 1147 hours. No ridge detail was visible.
	Ninhydrin	On 07/10/2019 - 1208 hours, the evidence was sprayed with Ninhydrin and allowed to sit for a chemical reaction.
	Visual Examination	Examined on 07/10/2019 - 1242 hours. No ridge detail was visible.
	Ninhydrin	On 07/10/2019 - approximately 1245 hours, a second application on Ninhydrin was conducted and it was allowed to sit for a chemical reaction.
	Visual Examination	Examined on 07/10/2019 - 1430 hours. No ridge detail was visible.
	Ninhydrin	On 07/10/2019 - 1431 hours - the evidence was allowed to sit for a chemical reaction.
	Visual Examination	Examined on 07/11/2019 - 1115 hours. A very small area of ridge detail was developed in quadrant "D." - An evidence quality 1:1 photograph was taken of the ridge detail.
	Ninhydrin	On 07/11/2019 - approximately 1135 hours, an additional application of Ninhydrin was conducted and it was allowed to sit for a chemical reaction.
	Visual Examination	Examined on 07/12/2019 - 1120 hours. Additional ridge detail developed (to the existing detail) in quadrant "D." An evidence quality 1:1 photograph was taken of the ridge detail.
	Ninhydrin	On 07/12/2019 - approximately 1125 hours, an additional application of Ninhydrin was conducted and it was allowed to sit for a chemical reaction.
	Visual Examination	Examined on 07/16/2019 - 1030 hours. No additional ridge detail had developed.
	Ninhydrin/indirect moist heat	On 07/16/2019 - 1035 hours, indirect moist heat was applied to the evidence.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
	Visual Examination	Examined on 07/16/2019 - 1036 hours. No additional ridge detail had developed. An evidence quality 1:1 photograph was taken of the ridge detail.
26ZBDB	Visual Examination	
	Alternate Light Source	
	Ninhydrin	(80°C ± 5°, 65% Relative Humidity ± 5%, 3 min.)
28T3R3	Visual Examination	
	Ninhydrin	Exposed to humidity for 24 hours.
28UHV8	Visual Examination	white light and magnification
	Ninhydrin	caron chamber 30 minutes
	Physical Developer (PD)	maleic acid 10 minutes, physical developer 10 minutes, water rinse until clear
2BAMCW	Visual Examination	Visual Examination on 7/11/2019 from 9:00am to 9:20am.
	Alternate Light Source	Alternate Light Source on 7/11/2019 from 9:25am to 9:50am.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming (Omega Print Fuming Compound - CNA102, Lot# 201903151) on 7/11/2019 from 10:00am to 10:35am.
	Ninhydrin	Treated with Ninhydrin (Acetone Base, Lot# A0379174-3) on 7/11/2019 from 11:10am to 11:20am, and then let dried.
	Visual Examination	Visual Examination on 7/12/2019 from 10:00am to 10:20am. Positive reaction on Section 1D.
2KCPU9	Ninhydrin	
2T6MCM	Ninhydrin	Dipped in Ninhydrin (PetEther) then placed in humidity chamber at 65% humidity and 80 C for 30 minutes
2UF84Q	DFO and Ninhydrin	Item dipped into DFO; Air dry approximately 5 minutes; heat for 20 minutes at 100 C. Item dipped into ninhydrin; Air dry few minutes; steam with iron; left to sit overnight.
2W77JA	Ninhydrin	Ninhydrin special formula / Photograph

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
2WP89X	Visual Examination	Light and magnification were used. Control test was not applicable. No ridge structure was observed.
	Alternate Light Source	LabKam that emits 254 nm of light was used. Control test was not applicable. No ridge structure was observed.
	1,2-Indanedione	Control test was positive. A heat press set at 165 degrees Celsius was used for 10 seconds. Item was brought to the Crimescope to analyze the 1,2-indanedione results.
	Alternate Light Source	Crimescope was used at a wavelength of 495 nm with orange goggles. Control test was not applicable. Ridge structure with no collection value was observed in Section D near the word "responsible". Ridge structure was faint and contained few minutiae characteristics.
	Ninhydrin	Control test was positive. No ridge structure was developed.
2ZPQJP	Ninhydrin	Item dipped in liquid Ninhydrin. Allowed to develop overnight.
39TWFX	Visual Examination	
	Alternate Light Source	LAS, CS, UV
	1,2-Indanedione	followed by LAS
	Physical Developer (PD)	
3DU74Y	Ninhydrin	06/28/2019: Ninhydrin Processing: Time Ninhydrin Applied - 1700 hours. Item placed into humidity chamber at 1703 hours with humidity control at 53.5%. Humidity control back to 53.5% at 1739 hours. Item removed from humidity chamber at 1819 hours with humidity control at 55.8%. Humidity Chamber: Humidity Control Set to 90.0%, Temperature Control Set To 32.2 degrees Celsius. Ninhydrin (+)Control - Lot#: 03122019SM, Exp: 03/12/20
3KCRYN	Visual Examination	White light & ambient
	Alternate Light Source	visual exam using Laser 535nm
	DFO	20min @ 100C
	Ninhydrin	6min @ 80C
3T3U2E	Visual Examination	Examined with oblique lighting, ALS with orange goggles, UV lamp, and LASER with orange goggles.
	DFO	Placed in an oven at 100 degrees for a few minutes and then visualized using a LASER and orange goggles.
	Ninhydrin	Placed in the humidity chamber at 70 degrees and 70% humidity for a few minutes.
	Zinc Chloride	Placed in the humidity chamber at 70 degrees and 70% humidity for a few minutes. Visualized with ALS.
	Physical Developer (PD)	Maleic Prewash for a few minutes followed by Physical Developer solution for a few minutes.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
3UV9HH	Visual Examination	Visual examination under white light and magnification.
	Ninhydrin	Ninhydrin batch #291. Item was immersed in a tray of solution until all surfaces were completely wet. Item was air dried thoroughly. Item was placed in the CARON chamber at 60 degrees F and 60% humidity for one (1) hour, checking after 30 minutes.
	Physical Developer (PD)	Physical Developer batch #468. Completed by Latent Print Technician [Name].
3UWHLV	Visual Examination	White and UV light.
	DFO	100°C, 20 min.
	Ninhydrin	80°C, RH65%, 2 min.
3XFF8Z	Visual Examination	
	Alternate Light Source	365nm, 450nm, 532nm
	1,2-Indanedione	oven: 20 min, viewed under 532nm light
	Physical Developer (PD)	
3ZK69N	Visual Examination	Nothing
	Ninhydrin	weak print, 2 dippings
473XWT	Visual Examination	No latent print impressions observed
	Ninhydrin	Ninhydrin (petroleum ether). Enhancement observed and photogaphed
	Heat/humidity	Heat/humidity applied. 80°C and 65% humidity for three minutes. Enhancement observed and photographed. Only fragmentary friction ridge detail of no value for comparison purposes.
	Vacuum metal deposition	Vacuum metal deposition utilizing gold followed by zinc. No improvement of development of the fragmentary friction ridge detail.
49ZML2	Alternate Light Source	Tracer 532 nm (green light) for inherent fluorescence and was negative.
	DFO	Used solution 1, chamber NINcha pre-programmed cycle at 100 degree C for 20 minutes.
	Ninhydrin	used Caron chamber at 65% humidity, at 80 degree C for 2 minutes.
	Physical Developer (PD)	followed procedure with multiple submersion

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
49ZP9K	Ninhydrin	6/19/19: Visual exam with FLS, no visible ridge detail found. Item treated with ninhydrin, and allowed to cure for a minimum of 72 hrs. Ninhydrin tested prior to being applied, and performed as expected. 6/24/19: Visual exam with FLS, no ridge detail found. The item which had been treated with ninhydrin on 6/19/19 was then exposed to steam. Visual exam repeated with FLS.
4AM3FN	1,2-Indanedione	Heat Press, Bright Beam laser exam (532nm/used orange goggles)
	Ninhydrin	Steam Iron
4APPW3	Visual Examination	No prints were observed.
	Ninhydrin	Day 1: The evidence was dipped in ninhydrin
	Visual Examination	No prints were observed.
	Ninhydrin	Day 2: The evidence was dipped in ninhydrin
	Visual Examination	Ridge detail was present in Quadrant D.
	Steam application with an iron	Day 3: Steam was applied to the paper using an iron. Prints were developed in Quadrant D.
4HWDLU	1,2-Indanedione	applied Indanedione, added heat
	Alternate Light Source	viewed with Mark 8 (Lt blue light) Foster Freeman DCS-5
	Ninhydrin	applied Ninhydrin, placed in humidity chamber for 30 min at 40 RH/ 80 dregrees temp
4KB2JT	Visual Examination	Oblique and direct lighting
	Ninhydrin	Aqueous Ninhydrin - Working solution inside iron - applied heat and steam through iron
	1,2-Indanedione	Pre-mix solution of 1,2-Indanedione was sprayed on the item - allowed to dry - applied heat and steam through iron - viewed with Laser and orange googles
	Laser	Light source (Laser) and orange goggles used to visualize due to 1,2-Indanedione being applied to the item
	Visual Examination	After letting the item sit over the weekend to allow for further development - oblique and direct lighting
	Ninhydrin	Re-applied Aqueous Ninhydrin to item 1 - Working solution inside iron - applied heat and steam through iron
4QUHUH	Visual Examination	
	Ninhydrin	Applied Heptane ninhydrin on 6/25/2019 and allowed the evidence to dry for one hour.
	Caron Fingerprint Development Chamber	The evidence was placed in the Caron Fingerprint Development Chamber for a period of 10 minutes at a temperature of 80 degrees Celsius and 65% relative humidity.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
4RRAUQ	Visual Examination	LED and Ambient lighting
	1,2-Indanedione	and 1,2 indanedione-zn 505 nm
4UV3L4	Ninhydrin	sprayed with Ninhydrin for 15 seconds until wet, then applied wet heat via steam iron
629FZT	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Physical Developer (PD)	
63PT3P	Visual Examination	Visual examination of the paper, no prints observed.
	1,2-Indanedione	Saturated the paper with IND, let dry for several minutes, and placed the paper in the IND oven for approximately three hours. Temperature reached 200 degrees.
6BZADW	Visual Examination	fluorescent lighting
	Ninhydrin	batch 291, caron chamber, fluorescent lighting, ridge detail in section "D"
	Physical Developer (PD)	batch 467, fluorescent lighting
6FLQNF	Visual Examination	white light , natural light and UV light (350nm). No fingerprint observation
	1,2-Indanedione	While 470 to 590 nm with forensic light . fingerprint observation are positive in the section "D" .
	Ninhydrin	is not better than indandiona , can not observate another or the same fingerprints.
6MUQ3W	Visual Examination	Tracer, Blue/ Green Rofin Light Source
	DFO	Blue/ Green Rofin Light Source; Caron Temp. 100 degree Celsius for 20 mins
	Ninhydrin	Amb. lights; Caron Temp. 80 degree Celsius and 65 percent RH for 2 mins
	Physical Developer (PD)	Amb. lights; Solution A 20 MLs, Solution B 360 MLs
6TVK4Y	Visual Examination	Examined with flashlight and ambient room light
	1,2-Indanedione	Heat applied with heat press for approximately 10-15 seconds. Examination using Laser @ 532nm with orange barrier filter goggles.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
6WW8YN	Visual Examination	Item 1 is stored in a 8x10 manila envelope with a red strip of evidence tape with "CTS" written on it. Item 1 was observed to be a white, square piece of paper with typed words and contains four square quadrants marked A through D.
	Iodine fume	Item 1 was processed with an iodine fuming gun (DF2016), with the entire surface treated. No friction ridge patterns were developed or observed.
	Ninhydrin	Item 1 was processed with Ninhydrin (lot # 1546061219), and allowed to dry in a venting system, then subjected to a Ninhydrin heat and humidity chamber for a total of thirteen hours. Some detail was observed in quadrant D, however the detail appeared to be that of a textured glove.
	Physical Developer (PD)	Item 1 was submerged in a distilled water pre-treatment wash, using a clean Pyrex glass dish, for five minutes and gently rocked. The item was then submerged in a maleic acid pre-treatment, in another clean Pyrex glass dish, for five minutes and gently rocked. The item was then submerged in a Physical Developer working solution (Sirchie PD Solution A and B), in a clean Pyrex glass dish, for ten minutes and gently rocked. Finally, item 1 was submerged in a rinse solution comprised of distilled water, in a clean Pyrex glass dish, for three minutes. No friction ridge patterns were developed or observed.
6XPGTP	Visual Examination	06/03/2019 at 1302 hours. Negative result
	Alternate Light Source	06/03/2019 at 1310 hours. Green Laser 532 nm used an orange filter. Negative result
	DFO	06/04/2019 at 0623 hours. Formula DFO 05-07-19. DFO Oven used 20 minutes at 210 degrees. Ridge detail present in the Quadrant D using green laser 532 nm with an orange filter. Small amount of ridge detail also present in Quadrant C
	Ninhydrin	06/04/2019 at 0654 hours. Formula Nin 05-01-19. Ninhydrin acceleration chamber used. Ridge detail present in Quadrant D. No additional development from DFO.
6XU4EQ	Visual Examination	With ambient light and a flashlight
	Ninhydrin	Performed at 80 degrees Celsius, 65% humidity for approximately 15 minutes
	Physical Developer (PD)	Item suspended in distilled water for 10 minutes, maleic acid for 15 minutes, redox solution for 25 minutes, rinsed with cold tap water and dried
6YQH7P	Visual Examination	I performed a visual examination on the piece of paper. I did not observed any ridge detail.
	Ninhydrin	I applied Ninhydrin to the piece of paper and let it dry in the fume hood for approximately 15 minutes. I then stored the piece of paper in my locker for nine days. I performed another visual examination after the nine days and observed faint ridge detail in section D.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
6ZW4FN	Ninhydrin	Processing time = approximately 30 mins. Humidity chamber 32.2 degrees Celsius at 90% humidity. Ninhydrin positive control tested +. Lot #03122019SN Exp 03/12/2020
73EDUL	Visual Examination	White light, ALS, and Laser
	1,2-Indanedione	IND applied and let evaporate. Dry iron used for 5 min. Control developed in <1 minute.
	Ninhydrin	NIN applied and let evaporate. Steam iron applied for 3 to 5 minutes. Control developed in <1 minute.
76LDCL	Visual Examination	visual exam under magnification
	1,2-Indanedione	used heat press laser exam/532nm/used orange goggles
	Ninhydrin	used steam iron
7FLBNN	Visual Examination	No visible print.
	Ninhydrin	Cabinet: NINchaM31, temperature:72 celsius humidity:65% time: 7 minutes
7LUTPF	Visual Examination	Notepage photography
	Ninhydrin	Heptane Ninhydrin applied 6/17/19, dried 1 hour, Caron Chamber used- 10 minutes
7P98WG	Visual Examination	direct and siding lighting
	Alternate Light Source	view between 455-515. UV lighting flash light
	DFO	apply, air dry in hood, chamber, alternate light source 455-515
	Ninhydrin	Apply, air dry in hood, chamber with water for humdity
7PP9WX	Ninhydrin	1.Forensic Climate Cabinet FKC-MK4. Temperature 80 celcius, Humidity 67%. Processing time 7 minutes. 2.Visual examination with white light and mini-crimeskope and Crime-lite 42 S
7R2VGX	Visual Examination	
	Alternate Light Source	
	Ninhydrin	(80°C ± 5°, 65% Relative Humidity ± 5%, 3 min.)

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
7XMT6K	Visual Examination	A visual examination was conducted on Item 1 with oblique lighting.
	Ninhydrin	Item 1 and a set of test prints were saturated with Ninhydrin and allowed to air dry. Item 1 along with the test prints were placed in a Ninhydrin chamber which was set for 80 degrees Celsius at 65% relative humidity for one hour. Lot #1, Test Print Positive.
	Visual Examination	A visual inspection revealed that no latent prints were developed on Item 1. Test prints developed as expected.
	Ninhydrin	Item 1 and a new set of test prints were processed a second time with Ninhydrin. Item 1 along with the test prints were placed in a Ninhydrin chamber which was set for 80 degrees Celsius at 65% relative humidity for one hour.
	Visual Examination	A visual inspection revealed that no latent prints were developed on Item 1. Test prints developed again as expected.
839ARU	1,2-Indanedione	15 min, 70 C, 65 %
83E4PN	Visual Examination	
	Ninhydrin	Heptane Ninhydrin (dried 1 hour). Caron Fingerprint Development Chamber (10 minutes)
8B6ZGC	Visual Examination	
	Alternate Light Source	white light, ALS 425-530nm
	Ninhydrin	dip method, let dry, heat ~10min
8DXW76	Visual Examination	
	Alternate Light Source	
	Ninhydrin	(80°C ± 5°, 65% Relative Humidity ± 5%, 3 min.)
8DZ8WM	Visual Examination	Oblique lighting with magnification
	Ninhydrin	Appled Non-running Ninhydrin using a squirt bottle. Saturated the item and allowed it to air dry in the processing hood / Observed ridge detail 9 days after processing
8LA4NU	Visual Examination	VIS, UV, none fingerprint
	DFO	CAST recepture, 100 degree C, 20 min., fingerprint - section D
	Ninhydrin	CAST recepture, 80 degree C, 62 %RH, fingerprint - section D

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
8REWUJ	1,2-Indanedione	Indandione chemical batch no. 15AS936. Chemical solution contains 1,2-indandione, Ethyl Acetate, Methanol, Acetic Acid, HFE7100, Zinc Chloride. Weiss Gallenkamp oven used for processing. Temperature set to 100C, Relative Humidity disabled. Processing time of 10 minutes. Control sample positive.
	Ninhydrin	Ninhydrin chemical batch no. 139752. Chemical solution contains Ethyl Acetate, Absolute Ethanol, Ninhydrin Crystals, Acetic Acid, HFE7100. Weiss Gallenkamp oven used for processing. Temperature set to 80C, Relative Humidity 62%. processing time of 6 minutes. Control sample positive.
8UMKDZ	Visual Examination	This was completed using white light and magnification. If a print is observed it will be photographed or scanned.
	Ninhydrin	This was completed by dipping the piece of paper into the solution of Ninhydrin. It was hung to dry. Once dry the item was placed into the humidity chamber for 30 mins at 60 degrees Celsius. The item was then examined with white light and magnification. Batch Number 91. If a print is observed it will be photographed or scanned.
	Physical Developer (PD)	Examined using white light and magnification after receiving item back from a latent print technician who completed the processing of the item. If a print is observed it will be photographed or scanned.
8WRRJT	1,2-Indanedione	1.1,2-Indanedione solution was mixed at room temperature in the following order : 0.125g of 1,2-Indanedione, 5 mL acetic acid and 45 mL ethyl acetate, 450 mL HFE 7100. 2.Dipping Item 1 in the 1,2-Indanedione solution. 3.Air-dry for a few minutes. 4.Baking Item 1 in an oven at 100°C for 20 minutes.
8WT74L	Ninhydrin	Processing time 1 day. Heat applied after 1 day.
8X4RTM	Ninhydrin	Visual examination. Positive control of Ninhydrin conducted with appropriate results. Spray application of Ninhydrin (Lot: 03122019SM, exp: 03/12/2020). One (1) hour in humidity chamber - 32.2 degrees Celsius at 70%. humidity Twenty four (24) hour development hold
983NTP	Visual Examination	Visual examination with white light and magnifying glass, no findings.
	Ninhydrin	Using the NINcha M31 climatic cabinet. Humidity 65% temperature 72°C. Processing time in the climatic cabinet 6 minutes. After that part of print was lightly visible in section D, prints on test paper was clearly visible.
987M9X	Visual Examination	White light and magnification
	Ninhydrin	Batch #291; CARON chamber (60 degrees Celsius, 60% relative humidity, 1 hour)
	Physical Developer (PD)	Batch #467; Completed by Latent Print Technician [Name]

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
9DVGFQ	Visual Examination	forensic light source
	1,2-Indanedione	50°C, 40% rel. humidity, 3h
	Ninhydrin	26°C, 65% rel. humidity, 72h
9FWRZT	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Physical Developer (PD)	
9HQWWR	[No Methods Reported.]	(1) Visual Examination with oblique magnified light and a laser. (2) 1,2 Indanedione (direct dry heat with iron and viewed with Laser - 445nm and OCB filter), (3) Iodine Crystals (Ev placed within plastic bag then heated with a hairdryer to accelerate the fuming process), (4) Ninhydrin (Heptane PE) (direct steam heat with iron). (5) Allowed evidence to rest in ambient room conditions additional 45 minutes and fragmentary friction ridge skin detail became visible.
9JXVUZ	Visual Examination	White light and magnification - no lats
	Alternate Light Source	Exam laser/orange filter - no lats
	1,2-Indanedione	Dipped in IND; allowed to dry; 20 mins in heat/humidity (80 degrees/65%) chamber; examine with laser - 1D to photo; others - no lats
	Ninhydrin	Dipped in NIN; allowed to dry; 20 mins in heat/humidity (80 degrees/65%) chamber - no lats
	Physical Developer (PD)	Placed in succession in DI water /maleic acid /PD working solution /water rinse in a tray on an orbital shaker for 5 to 10 mins each - no lats
9U36XX	Visual Examination	Tracer Laser; 505nm with orange goggles
	DFO	100 degrees Celsius, 20:00 processing time. Tracer Laser; 505nm with orange goggles
	Ninhydrin	80 degrees Celsius, 65% RH, 2:00 processing time
	Physical Developer (PD)	15:00 processing time
ABJ7U8	Visual Examination	Flashlight, UV, LASER
	DFO	LASER to visualize and wait 24 hours
	Ninhydrin	wait 24 hours
	Zinc Chorlide	ALS to visualize and wait 24 hours
	Physical Developer (PD)	in PD solution for approximately 20 minutes

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
AFRU6M	Visual Examination	
	Alternate Light Source	365nm, 450nm, and 532nm
	1,2-Indanedione	Visual and 532nm
	Physical Developer (PD)	
AG7WEG	white light, Indanedione, Ninhydrin	Visual exam - white light. Indanedione - air-dry approx. 20 min., visual exam w/green light. Ninhydrin - air-dry, heat-chamber approximately 20 min., visual exam under white light
AJWNJD	Visual Examination	Examined with white light and magnification on 06/04/19
	Ninhydrin	Batch #291 on 6/9/19. Submerged in Ninhydrin solution then air dried. Place in a humidifying machine: CARON. Examined with white light and magnification
	Physical Developer (PD)	Processed by LPT [Name] on 6/12/19, Batch #467. Examined with white light and magnification
ALGAVF	Visual Examination	
	Ninhydrin	Processed with Ninhydrin on 6/3/19, along with a test piece. After a few hours of hanging in the hood, my test piece began developing. My sample had not. Therefore, opened a new ninhydrin can, tested it on a different test piece of paper, after a few hours, it also developed. Sprayed the sample again, with the 'new' ninhydrin and let hang in the hood overnight (along with both test pieces). 6/4/19- The two test pieces had developed even more. My sample had not. Put the sample in the heat press along with the test pieces. No development. Did the steam iron over the sample, no development, no ridge detail. Both my test prints were positive but my sample was not.
AN7KQE	1,2-Indanedione	Indanedione-squirt bottle- dry and add heat to speed up reaction
	Ninhydrin	Ninhydrin-squirt bottle-dry-put it on humidifier for 30 min
ANLYYN	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Alternate Light Source	
	Physical Developer (PD)	
	Visual Examination	
APZ6Y6	Visual Examination	under different types of light
	1,2-Indanedione	+ zinc chloride, 200°F - 20 minuts
	Ninhydrin	room temperature- 48 hours development

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
AR8J8Y	Visual Examination	
	Alternate Light Source	Light source 519 - 543 nm
	Ninhydrin	Dipped in solution. Left to dry for 20 minutes. In heater humidity owen for 5 minutes in 80 degree C and 70% Rh.
AY6E2Q	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Physical Developer (PD)	
B2P7LD	Visual Examination	A visual examination of item completed prior to administering chemical development methods.
	Ninhydrin	Control (PLAP) completed alongside ninhydrin processing of white printer paper. Paper and control allowed to air dry for approximately thirty (30) minutes. Air drying resulted in a positive control test.
	Steamer	After allowing paper to air dry, a hand steamer was applied to further develop any ridge detail. One (1) partial print was developed in quadrant "D"
B2QU9H	Visual Examination	Natural light
	DFO	Immersed in DFO working solution; heated in a chamber to 100 degrees Celsius for 20 minutes; viewed under Orange filter with ALS at 495nm & 515nm.
	Ninhydrin	Immersed in Ninhydrin working solution; heated at 80 degrees Celsius with 70% humidity for 20 minutes; visual exam under natural light.
B3LGPT	Visual Examination	Ambient lighting and green/Tracer laser
	DFO	100C, 20 minute processing time
	Ninhydrin	80C, 65% humidity, 2 minute processing time
	Physical Developer (PD)	15 minute processing time in PD solution
B3LJCC	Visual Examination	No latent prints observed.
	Iodine	No latent prints developed.
	Ninhydrin	Latent prints developed.
	Silver Nitrate	No latent prints developed.
B6N4WK	1,2-Indanedione	Indanedione- applied heat for 5 minutes
	Alternate Light Source	ALS at 495 nm, orange filter
	Ninhydrin	Ninhydrin- 40'C, 80% humidity in humidity chamber for 30 min

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
B7GRJM	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Physical Developer (PD)	
B9QTL7	Visual Examination	Visible reflection + fluorescence (alternate light source). Room temperature = 24°C. Relative humidity = 65 %. Date analyzed : 15/07/2019
	1,2-Indanedione	+ zinc chloride. Immersion of the whole item. Dry heat press at 165°C for 10 seconds. Date analyzed : 15/07/2019
	Visual Examination	Visible reflection + fluorescence (alternate light source). Room temperature = 24°C. Relative humidity = 65 %. Date analyzed : 15/07/2019
	Ninhydrin	Immersion of the whole item. 48 h development : in the dark, at room temperature (25°C), with a relative humidity of 60 %. Date analyzed : 15/07/2019
	Visual Examination	Visible reflection + fluorescence (alternate light source). Room temperature = 24°C. Relative humidity = 65 %. Date analyzed : 18/07/2019
	Physical Developer (PD)	Room temperature = 24°C. Relative humidity = 68 %. Date analyzed : 19/07/2019
	Visual Examination	Visible reflection + fluorescence (alternate light source). Room temperature = 24°C. Relative humidity = 68 %. Date analyzed : 19/07/2019
BQNHTF	Ninhydrin	This item was adequately covered in the ninhydrin liquid using squirt bottle
BWHUX8	Visual Examination	side lighting with white light
	Alternate Light Source	Wavelengths 415nm, 450nm, 505nm, & 530nm
	Ninhydrin	Acetone carrier, sprayed, Oven (~67 degrees C. for 30 minutes)
C2A6HB	DFO	10 min, 100 C, 0% RH
	Ninhydrin	2 min, 80 C, 65% RH
	Physical Developer (PD)	Processed until deemed fully developed.
C47AWB	Ninhydrin	Dipped in solution. Left to dry. In heateroven for 5 minutesin 70 degree C and 70% Rh. Left to dry in 24 hours.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
C4BP9B	Visual Examination	white light, UV - 555 nm - Polilight PL 500, suitable googles
	DFO	processing time - 20 minutes, temperature - 95 degree Celsius
	Visual Examination	495 - 530 nm, orange coloured google
	Ninhydrin	processing time - 3 hours, temperature - 25 - 30 degree Celsius, humidity - 70%
	Visual Examination	white light
C7X9CU	Visual Examination	White Light/ALS
	1,2-Indanedione	Soak method/Laser
C88VKD	Visual Examination	Ambient light
	Alternate Light Source	Foster + Freeman Crime-lite ML2. Green 480-560 nm and Blue 420-470 nm. No filter, red filter, orange filter, and yellow filter
	Ninhydrin	Ninhydrin Working Solution Petroleum Ether. Sanyo Gallenkamp Chamber 80 Celcius 65% relative humidity (50 minutes)
	Visual Examination	Ambient light
	Alternate Light Source	Foster + Freeman Crime-lite ML2. Green 480-560 nm and Blue 420-470 nm. No filter, red filter, orange filter, and yellow filter
CA4KGB	Visual Examination	Used ambient lighting.
	DFO	The paper notice was saturated by dipping the item in DFO working solution. Once removed, the item was allowed to dry in a fume hood at room temperature before being placed in an oven set for 100 degrees Celsius for 20 minutes.
	Alternate Light Source	The paper notice was examined with an alternate light source (Rofin Polilight PL500) at 505nm with orange goggles.
	Ninhydrin	The paper notice was saturated with ninhydrin work solution (with HFE-7100 carrier solvent) by use of a squirt/wash bottle. The item was allowed to dry in a fume hood at room temperature before being subjected to steam and heat from an iron. The item was then stored in a dark and secure location for at least 24 hours before an examination was performed. An examination of the item was performed with ambient light.
	Visual Examination	Used ambient lighting.
	Oil Red O	The paper notice was immersed in a bath of Oil Red O (ORO) stain solution for 90 minutes. After the ORO stain solution was drained off of the item, it was immersed in a buffer solution for five minutes. After the buffer solution, the item was immersed in water, allowed to completely dry and then examined with ambient light.
	Visual Examination	Used ambient lighting.
CFNP63	Visual Examination	Under different types of light
	1,2-Indanedione	observation under cyan light 500nm and orange filter
	Ninhydrin	observation under white light (no results after ninhydrin process)

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
CJM3TU	Visual Examination	In daylight and flashlight and in whole spectrum of Polilight PL 500 none fingerprint
	DFO	A fingerprint has been disclosed; section - D
	Ninhydrin	No improvement in a fingerprint quality
CPAVWG	Visual Examination	With different kinds of light sources. White, sidelong, blue and green. Neg.
	DFO	DFO with HFE, 100C, processing time 30 min. Neg
	Ninhydrin	Nin with HFE, processing 2 minutes after receiving 62% RH and 80C. Pos.
CQ9GTY	Visual Examination	Using white light and magnification, item was examined for prints.
	Alternate Light Source	Using a Crime Lite ML2 (420nm-470nm, orange filter), item was examined for prints.
	Ninhydrin	Item was processed with Ninhydrin batch # 291, allowed to dry for 10 minutes, and then processed using a CARON humidity chamber for 45 minutes. Item was examined for prints.
	Physical Developer (PD)	Item was placed in a maleic acid wash for 10 minutes, then processed with physical developer batch # 468 for 10 minutes, and lastly placed in to a water rinse for 10 minutes and allowed to dry. Item was examined for prints.
CYXQXH	1,2-Indanedione	dipping once Attestor NINCha cabin: 65'C, 65%, 30min
D3FN36	Ninhydrin	Sprayed item with Ninhydrin, then placed in humidity chamber for 30 minutes - 1 hour.
D62QQP	Visual Examination	A visual examination was conducted with forensic light sources using wavelengths form 450 nm to 650 nm as well as with white light. A green laser (Tracer) was used to check for inherent fluorescence.
	DFO	Dipped paper into DFO solution then let dry. Then put paper into environmental chamber (Caron) with temperature set to 100 degrees C for 20 minutes.
	Ninhydrin	Dipped paper into Ninhydrin solution then let dry. Then put paper into environmental chamber (Caron) with temperature set to 80 degrees C at 65% relative humidity for 2 minutes.
	Physical Developer (PD)	Piece of paper was put into distilled water for 10 minutes to remove NIN. Then the paper was then put into maliec acid for 10 minutes. next the paper was then dipped into distilled water. After that the paper was put into the PD for 20 minutes. Then the paper was put into distilled water to rinse out the PD. Then the paper was left to dry.
D8RRWD	Alternate Light Source	
	DFO	~20 min
	Ninhydrin	~6 min

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
DHMMQG	Ninhydrin	Aerosol Spray on to white piece of paper. Control - upper right corner. Day time - 4 hours vent hood. Continued development over the next 7 days. Faint latent developing on section d after three days.
DJKN2E	Visual Examination	No visible latent prints were found during the initial visual exam.
	Ninhydrin	Outside Temp: 92.8 Degrees F. 56.5% RH (Humidity) Room Temp: 70.0 Degrees. A test print was developed with the Ninhydrin (Heptane Base) solution prior to the sheet of paper being submerged into the Ninhydrin. The sheet of paper was removed from the Ninhydrin and was hung on the line in the fuming hood to dry and sit overnight. 6/25/19 - Steam Iron was used to add humidity to the item to help with development.
	Visual Examination	6/25/19 - During visual exam after processing there appears to be an area in Quad D that apprears to have developed. 7/17/19 - Final Visual Exam.
DKVPND	Visual Examination	
	Alternate Light Source	
	DFO	
	Ninhydrin	
DPM2GP	Visual Examination	
	Alternate Light Source	
	Ninhydrin	(80°C ± 5°, 65% Relative Humidity ± 5%, 3 min.), repeated after 24 hours
DQHM4N	Visual Examination	N/A
	Alternate Light Source	N/A
	1,2-Indanedione	N/A
	Physical Developer (PD)	N/A
DWQ4LP	Visual Examination	Visual - no prints visible
	Ninhydrin	Pet-Ether based ninhydrin. Hung in fume hood to dry/process.
E6GQ9E	Visual Examination	No latent print ridge detail could be seen on Item 1 with a visual inspection prior to processing.
	Ninhydrin	Item 1 was processed using ninhydrin, allowed to dry, and steam heat was applied to develop any latent prints.
EEK47U	Visual Examination	WHITE LIGHT AND LASER 532nm
	1,2-Indanedione	HEAT PRESS - 2 MINUTES - VIEW WITH LASER 532nm AND ORANGE GOGGLES

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
EMV3Z6	Visual Examination	
	Ninhydrin	Item submerged in ninhydrin HFE then allowed to dry in fume hood for approximately 20 minutes.
	Heat & Humidity	Steam applied to item using an iron for approximately 4 minutes.
EP3KY2	Visual Examination	I started with a visual examination using UV/ALS/Laser/Flashlight light sources.
	DFO	Next, I processed the paper using DFO, let it dry, placed in an oven. I observed a latent impression fluoresce when a laser light source was applied.
	Ninhydrin	Next, I processed the paper with Ninhydrin, let it dry, placed in humidity chamber. There was no improvement to the latent impression that was developed with DFO. No further latent impressions were observed.
	Zinc Chloride	After Ninhydrin, I processed the paper with Zinc Chloride, let it dry, placed in humidity chamber. There was no improvement to the latent impression that was developed with DFO. No further latent impressions were observed.
	Physical Developer (PD)	After Zinc Chloride, I processed the paper with Physical Developer, let it dry. There was no improvement to the latent impression that was developed with DFO. No further latent impressions were observed.
EWNDCL	Visual Examination	White light 10 AM 24/6/2019
	DFO	11 AM 24/6/2019 oven temp 100 c for 20 minutes green light for viewing
	Ninhydrin	11 Am 25/6/2019 oven temp 75 c and Humidity 65 Rh
EZNP9L	Visual Examination	White light 10 Am 24/6/2019
	DFO	11 Am 24/6/2019 oven temp 100 c for 20 minutes green light for viewing
	Ninhydrin	11 Am 25/6/2019 oven temp 75 C and Humidity 65 Rh
F3MZGC	Visual Examination	White light
	DFO	Alternate light source
	Ninhydrin	White light

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
F9UVF9	Visual Examination	White light
	1,2-Indanedione	chemicals; 1,2,Indandione, Ethyl Acetate, Methanol, Acetic Acid, HFE 7100, Zinc Chloride made into our batch number 15AS936 of 1,2 Indandione. Treated using a Weiss Gallenkamp FDC018 fingerprint development oven set to 100 degrees centigrade and ambient humidity. Treatment time - 10 minutes. Control sample positive
	Ninhydrin	chemicals; ready made ninhydrin solution (Banner Chemicals) batch number 139752 Treated using a Weiss Gallenkamp FDC018 fingerprint development oven set to 80 degrees centigrade (+/- 2 degrees)and 62% relative humidity (+/- 5% RH). Treatment time - 6 minutes. Control sample positive
FG83XX	DFO	Visual examination (000-495nm); photography; 100°c
FP28QY	Visual Examination	White light ~2mins
	Alternate Light Source	~350nm to ~620nm ~10mins
	DFO	1 latent (possible overlay developed), ~processing time (including control) with photographing ~30mins
	Ninhydrin	1 latent (part of the overlay from the DFO print) developed,(including control) and photographing ~20mins
	Physical Developer (PD)	~1.5 hrs (time includes control, drying and clean-up)
FRTMGF	Visual Examination	Flashlight
	Alternate Light Source	ALS 455-515 nm
	Ninhydrin	Processed item twice and applied 5 minutes of steam each time.
FWHKRJ	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Physical Developer (PD)	
G4XLN8	Visual Examination	Nothing Noted
	Vacuum metal Deposiition	Nothing Developed
G73WD2	Visual Examination	
	1,2-Indanedione	
	Alternate Light Source	Laser 532nm. Friction ridges detected during laser examination
	Ninhydrin	No friction ridge detail was detected with ninhydrin

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
G8EC82	Ninhydrin	Applied Ninhydrin to paper and control. Allowed these items to dry. Placed paper and control into the humidified incubator set at temperature 33.1 C and 80% humidity. Monitored the items for over eight hours.
	Visual Examination	The control was positive (ridge detail developed) but Item 1 was negative. Nothing developed.
GBDAJ9	Visual Examination	First viewed samples under natural and forensic ligths. In this case we could not see fingerprints.
	Ninhydrin	Then the sample was completly sprayed with ninhydrin 5MTN for 5 seconds and then placed into the oven for 5 minutes at 80°C temperature and 65% humidity. After that the sample was placed into a plasic bag for 24-48 hours in order to minimize the exposure to the ligth, and in the end you can observe the results with natural ligths.
GHELE7	Visual Examination	
	Alternate Light Source	Light source with various vave
	Ninhydrin	Dipped in solution, left to dry for 20 minutes. In heater humidity owen for 5 minutes, 70 degree C and 70% Rh
GLBBVD	Visual Examination	No visible print.
	Ninhydrin	Cabinet: Nincha M31. Humidity 75%, temperature 65 degrees, time 30 min.
GMRXDD	Visual Examination	Examined paper with oblique lighting for visible prints or indented writing.
	Alternate Light Source	Examined paper with ALS at wavelengths 415-515nm for visible/fluorescing prints.
	Ninhydrin	Sprayed on working solution. A print developed after 24 hours of processing time.
GR7FUU	Visual Examination	Fluorescence lighting examination.
	Ninhydrin	Immerse time of approx. 5 seconds in Ninhydrin. Caron Development Chamber after Ninhydrin for approx. 30 minutes. 60 degrees C, 60% RH.
	Physical Developer (PD)	
GWWQ38	Visual Examination	Note page photos taken.
	Ninhydrin	Heptane ninhydrin applied. Caron chamber used for ten minutes.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
H6N8WN	Visual Examination	visual examination natural light, illuminator Polilight PL 500 UV, entire range of wavelenght of light and filtres. The trace wasn't recovered.
	DFO	DFO- spray, Chamber temp. 90C, 10 min., illuminator Polilight PL 500 505-530 nm orange filtres.The trace was recovered.
	Ninhydrin	Ninhydryna - spray, Chamber temp. 100C, 10 min., humidity 60%, white and natural light.
H9PTLR	Visual Examination	The item was visually examined using a white LED light source under magnification.
	Alternate Light Source	The item was examined for the presence of inherent luminescence using Crime Lite ML (460-510 nm: Orange Filter) under magnification.
	Ninhydrin	The item was processed by immersing in a tray of Ninhydrin solution for approximately 5 seconds, the item was dried in a fume hood, and placed inside a Caron chamber for accelerated development. The conditions of the Caron chamber were set for 60 degrees Celsius and 60% relative humidity. The item was checked for accelerated development at approximately 30 minutes.(No Prints were observed)The item was left in the Caron Chamber for an additional 30 minutes. (No prints were observed)
	Physical Developer (PD)	PD processing was completed by Latent Print Technician [Name] on June 12, 2019. The batch this item was completed under was batch number 467.
HAJH4M	Ninhydrin	The typed letter was sprayed with Ninhydrin Lot #011419A (QC: +known print -non print) for the development of latent prints. The item was secured in assigned locker to air dry. The typed letter was examined on June 6, 2019, A latent print of possible value observed in middle area of quadrant D.
HDF948	Alternate Light Source	Crimescope: 415nm - 535nm with yellow, orange, and red filter; 535 nm without filter
	Ninhydrin	Ninhydrin (Petroleum Ether) Working Solution - Tray immersion; Allowed to air dry in fume hood; Placed in FDC 060 Environmental Chamber at 80 degrees Celsius and 65 percent relative humidity; 50 minute exposure
	Alternate Light Source	Crimescope: 415nm - 535nm with orange filter; 535 nm without filter
HDGFHF	1,2-Indanedione	Used Indanedione made by our on-site chemist. Let dry completely, approximately 5 minutes in fume hood. Placed in oven for approximately 25 minutes. Examined and photographed with laser and laser filter.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
HTUQ8M	Visual Examination	diffrent light sources and filters
	DFO	spray, temp. 90-95 C, time 10 min., 505-530 light, orange filter
	Ninhydrin	spray, temp. 80 C, humidity 65%, time 7 min., natural and white light (Chamber Nincha s31)
HUK84G	Visual Examination	Bright light. No ridge structure present. No collection method used
	1,2-Indanedione	320 degrees F on a heat press for 10 seconds. Positive control. Ridge structure not of collection value present in Box D. No collection method used
	Ninhydrin	80 degrees F, 80% humidity, for 4 minutes in a humidity chamber. Positive control. No ridge structure present right away or after 48 hours of letting the evidence sit. No collection method used
HUPUWA	Visual Examination	No visible fingerprints, trace evidence, or blood observed.
	Ninhydrin	
HVD6BN	Alternate Light Source	Visual examination and viewed with a 505nm, 450nm, and UV wavelengths. No ridge detail observed.
	1,2-Indanedione	Sprayed with 1,2-Indanedione and placed in the Caron development chamber at 100C, 60% humidity for 20 mins. Viewed with a 505nm wavelength. Ridge detail observed
	Ninhydrin	Sprayed with Ninhydrin and placed in the Caron development chamber at 80C, 65% humidity for 5 mins. No other ridge detail observed
HVKFJ9	Ninhydrin	Used PLAP as control and treated to heat/humidity source after Ninhydrin applied. Then applied Ninhyrdin to the Item 1 and treated to the same heat/humidity source. No latent development noted.
J2NY3J	Visual Examination	06.07.19 visual examination under white light and magnification; no prints observed
	Ninhydrin	06.07.19 batch 291, Caron Chamber heat and humidity for approx 40 mins; no prints observed
	Physical Developer (PD)	06.12.19 Batch 467, air dried, no prints observed
J6Z9BB	1,2-Indanedione	50°C, 40% rel. Humidity

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
JB8U3E	Visual Examination	Photograph as packaged. Then during visual examination (-)results.
	Ninhydrin	Ninhydrin was applied VIA spray bottle. Then during visual examination (-)results.
	Dryer Chamber	80 degree C; 65% RH; 3 minutes. Then during visual examination (-)results.
	Alternate Light Source	(-)results.
	1,2-Indanedione	1,2 Indanedione was applied VIA spray bottle. Then during visual examination (-)results.
	Dryer Chamber	100 degree C; 0% RH; 10 minutes. Then during visual examination (-)results.
	Alternate Light Source	(-)results.
	Zinc Chloride	(-)results. Then during visual examination (-)results.
	Alternate Light Source	505 with (-)results.
	Test	Since no results were found, a test sample on a separate sheet of paper was done to make sure the chemicals were working properly. A (+) result indicated that all chemicals worked well.
JCF28R	Visual Examination	
	Alternate Light Source	
	Ninhydrin	(80°C ± 5°, 65% Relative Humidity ± 5%, 3 min.) repeated
JDWECA	DFO	
	Ninhydrin	
JDXV92	Ninhydrin	soaked paper in ninhydrin and then hung up in hood for 24 hours, then processed with heat and humidity.
JEM82F	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	+LAS
	Physical Developer (PD)	
JHRBU9	Visual Examination	
	Ninhydrin	Humidity Chamber, Model: Caron Forensics 6105-2. Processing time of 20 min at 70% humidity and 70 degrees

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
JLPWH6	Visual Examination	One (1) 8 1/2" X 5 1/4" white piece of paper with typed message, in black ink, beginning, "Reminder to all Snyder Construction crew members:..." was examined. Front of paper is divided into quadrants labeled A-D in black ink. No FRD is observed on front or back of paper using white/ambient light.
	Alternate Light Source	No FRD is observed on front or back using Crimescope between 350-495 nm wavelength with orange and yellow filters.
	Ninhydrin	Paper was dipped in Ninhydrin, dried, and placed in Weiss Gallenkamp Chamber at 80 degrees Celsius with 65% humidity for approximately 30 minutes.
	Visual Examination	Negligible FRD observed with ambient/white light in quadrant labeled "D." No FRD observed in quadrants A-C, or on back of paper.
JU2PF2	Visual Examination	Examined sectors for any visible prints.
	Ninhydrin	dipped the paper in Ninhydrin solution, let it dry, applied steam with an iron over top of the paper.
K4HWRV	Ninhydrin	75 degrees Celsius. 80 percent humidity. 5 minutes. *processed twice due to negative result. Test prints were both strong positives. Viewed a second time on 07/10/19. Caron Chamber. Lot#041919-01
K4KJ7N	Visual Examination	looked at the paper and no print visible.
	Ninhydrin	Applied Ninhydrin to paper, allowed to dry, no print visible.
	Heat from iron	Applied an iron with steam to the paper, hovering over the paper about 1/2 inch. An outline of a print, and very small ridge detail was discovered in sector "D".
K6DFTV	Visual Examination	Before enhancement : Incident and field lightning with visible light (crimelite 2). raking light (crimelite 2). UV (crimelite 2 365nm)
	1,2-Indanedione	with hot press 165°C during 10s. visual examination with blue/green light and orange filter (crimelite 8x4)
	Ninhydrin	12-15h processing in a dark and humid environment. visual examination with blue/green light and orange filter (crimelite 2)
KE6P6D	DFO	DFO; oven 212°F/10 min
	Ninhydrin	NIN; Steam iron- also placed inside plastic bag overnight to promote further development
KEKYA8	Visual Examination	
	Alternate Light Source	
	DFO	
	Ninhydrin	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
KQKHZE	Visual Examination	no ridge structure, not collected, examined with magnifier and bright light source
	1,2-Indanedione	positive control, 320 degrees Fahrenheit heat press for 10 seconds, no ridge structure, not collected
	Alternate Light Source	Polilight at 505nm with orange filter, ridge structure no value, not collected
	Ninhydrin	positive control, 80 degrees Fahrenheit and 80% humidity in humidity chamber for 4 minutes, 48 hr waiting period, ridge structure no value, not collected
KXCZ7B	Visual Examination	No detail observed.
	Vacuum Metal Deposition	The item was placed in a Vacuum Metal Deposition chamber and processed using Gold and Zinc. The item was examined and no ridge detail was observed.
	1,2-Indanedione	The item was placed in a vented hood and sprayed with 1,2-Indanedione. The item was allowed to air dry for 5 minutes. After the item was dry it was placed in a fingerprint chamber for 10 minutes at 100 degrees Celsius and zero percent relative humidity. After 10 minutes the item was removed and allowed to cool for 3 minutes. The item was place in a vented hood and sprayed with Zinc Chloride. The item was allowed to air dry for 5 minutes.
	Alternate Light Source	The item was examined with an ALS using 505nm light band and orange goggles. A very small amount of ridge detail and a void were observed in section D but the ridge detail was insufficient for comparison.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
KZK7RC	Visual Examination	AT 8:58 AM, WHILE USING PROTECTIVE GLOVES, THE NOTE THAT WAS TYPED ON A PIECE OF WHITE OFFICE PAPER, WAS VISUALLY EXAMINED CAREFULLY ON THE DIVIDED SECTIONS A-D SIDE, UNDER MAGNIFIED LIGHTING TO DETECT ANY LATENT FINGERPRINTS AND PHOTOGRAPHED AND PHOTO COPIED ON BOTH SIDES BEFORE PROCESSING IT.
	Ninhydrin	AT 9:15 AM THE NOTE ALONG WITH A CONTROL SAMPLE WAS PROCESSED NEXT USING NINHYDRIN (ACETONE BASE, LOT#A0379174-3, EXP DATE:03-05-2020, AND DATE PREPARED:03-06-2019), IN ATTEMPT TO RECOVER, ENHANCE AND TO SUBMIT ANY LATENT FINGERPRINTS.
	Visual Examination	AT 9:40 AM THE SUBMITTED EVIDENCE WAS VISUALLY EXAMINED CAREFULLY EXAMINED AGAIN FOR DEVELOPMENT OF ANY NEW FINGERPRINTS UNDER MAGNIFIED LIGHTING. THE RESULTS WERE "NEGATIVE" FOR PRINTS USING THE NINHYDRIN, BUT THE CONTROL SAMPLE WAS POSITIVE FOR PRINTS.
	Magnetic fingerprint powder	AT 9:45 AM A 2ND ATTEMPT IN PROCESSING THE SUBMITTED EVIDENCE WAS BY DUSTING IT USING A MAGNETIC BLACK FINGERPRINT POWDER (LOT#0112110) IN ATTEMPT TO RECOVER, ENHANCE AND TO LIFT OR SUBMIT ANY LATENT FINGERPRINTS.
	Visual Examination	AT 9:55 AM THE SUBMITTED EVIDENCE WAS VISUALLY EXAMINED CAREFULLY EXAMINED AGAIN FOR DEVELOPMENT OF ANY NEW FINGERPRINTS UNDER MAGNIFIED LIGHTING. THE RESULTS WERE "NEGATIVE" FOR PRINTS.THE LATENT FINGERPRINT EXAMINATION WAS FINISHED AT 10:00 AM.
L2UKQ6	Visual Examination	Used ambient light to examine item of evidence.
	Alternate Light Source	Used ALS to examine item of evidence.
	Iodine	Placed item of evidence and Iodine crystals in sealed plastic bag; allowed to sit for 30 minutes; viewed results.
	DFO	Washed DFO over item, soaking it; item allowed to air dry; item heated to appropriate temp;
	Alternate Light Source	Item viewed under ALS
	Ninhydrin	Ninhydrin applied to item; allowed item to sit overnight; viewed item; applied steam heat to item.
L83VQC	Visual Examination	
	Alternate Light Source	Inherent Luminescence Exam
	Iodine Fuming	
	1,2-Indanedione	Exam with ALS (PL500 @ 505nm) after treatment. Latent detected in quadrant D.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
LFFDFH	Visual Examination	green light (Tracer Laser) used
	DFO	Caron Environmental Chamber used at 100 degrees Celsius for 20 minutes
	Ninhydrin	Caron Environmental Chanber used at 80 degrees Celsius and 65% humidity for 2 minutes
	Physical Developer (PD)	15 minutes in PD solution
LG8TQ9	Ninhydrin	Dip method, air dry, Caron humidity oven (80 degrees, 65% humidity), 5 minutes
LJAX29	Visual Examination	Utilized white light. Approximately 5 minutes.
	Ninhydrin	Reagent made in lab. Utilized dipping method. Saturated item and hung to dry. Applied steam using an iron. After 3 days, the item was re-dipped and steamed. Observed insufficient ridge detail in box D. Utilized the ALS (520nm with clear goggles). After one week, the item was further processed.
	1,2-Indanedione	Reagent made in lab. Utilized dipping method. Saturated item and hung to dry. Applied steam using an iron. Utilized the ALS (520nm with orange and red goggles). No additional ridge detail was developed.
	Oil Red O	Purchased chemical. Saturated the item in the stain solution then in the buffer solution then in water. The item was hung to dry. No additional ridge detail was developed.
LM96M7	DFO	DFO Saturates paper, oven (100C) 20 min. visualize with laser (532 nm). Batch #DFO-NY04152019. Test Print +
LMFVTA	Visual Examination	Oblique light. Also examined for indented writing with negative results.
	Alternate Light Source	Used Crimescope with wavelengths 455-515nm.
	Ninhydrin	Sprayed on Ninhydrin and allowed to develop overnight. Applied heat with iron. Reapplied Ninhydrin with additional time to develop overnight.
LPGG68	Alternate Light Source	no mark
	Ninhydrin	mark in section D
LPZ43P	Visual Examination	PoliLight PL500
	DFO	heating 10 min in 100°C
	Ninhydrin	put in chamber for 1 hour 55°C, RH 60%
LWLH2A	Visual Examination	Use of white light and magnifier
	Ninhydrin	Use of rinse bottle to apply non-running ninhydrin to saturate paper

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
LZKZY2	Ninhydrin	NIN-PRINT
	Steam heat	
	Visual Examination	
M27L7C	Visual Examination	Visual day light, clear led light (Crime-lite white light 400-700nm), but also with green (480-560nm) and blue (420-470nm)light. No findings.
	1,2-Indanedione	Using the NINcha M31 climatic cabinet. Humidity 65% temperature 65°C.Processing time in the climatic cabinet 29 minutes. After that print was clearly visible by using Crime-lite green light (480-560nm) and red goggles in section D.
M3LFP4	Ninhydrin	20 MIN. IN CHAMBER
M6B4CK	Visual Examination	Visual examination with ambient and oblique lighting. No ridge detail observed.
	Alternate Light Source	Visual examination with alternate light source with UV and 505nm wavelengths and clear and orange goggles. No ridge detail observed.
	1,2-Indanedione	Processed with 1,2-Indanetione and placed in the Caron Development chamber at 100C degrees for 60% humidity for 15 minutes.
	Alternate Light Source	Visual examination with alternate light source with 505nm wavelength and orange goggles. Ridge detail observed in section "D" - labeled MLP1. Photos taken.
	Ninhydrin	Processed with Ninhydrin at 80C degrees, 65% humidity for 5 minutes and allowed to air dry. No additional ridge detail observed. Ninhydrin did not provide better visualization of MLP1.
M7KUB9	Visual Examination	Examined for any patent prints and found none.
	1,2-Indanedione	I used a quality control on a piece of white paper to make sure Indanedione was working correctly. Once that was confirmed, I covered the evidence, white office paper, with Indanedione and put it in the heating oven for just over two hours, allowing the temperature to reach 200 degrees.
MCQ3K6	Forensic lights	The evidence is checked using "LUMATEC400" forensic ligth with all spectrum. 25° C room temperature.
	DFO	Sprayed DFO. Natural drying. The oven is used to visualice the developed latent print. 100° C temperatura. 0% humidity.
	Forensic lights	The evidence is checked again using "LUMATEC400" forensic ligth with all spectrum. 25° C room temperature.
	Ninhydrin	Sprayed Ninhidrine. Natural drying. The oven is used to visualice the developed latent print. 80° C temperatura. 65% humidity.
	Forensic lights	The evidence is checked again using "LUMATEC400" forensic ligth with all spectrum. 25° C room temperature.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
MEWXG8	Visual Examination	Pre processing photos - visual examination - RUVIS - ALS
	Powder Dusting	Magnetic powder
	Visual Examination	Post processing photos. No friction ridges developed on Item #1
MLD2BA	Ninhydrin	Dipped then allowed to dry. Used steam to develop
	Iodine fuming	Sealed in plastic bag with broken iodine ampule
MPCEWE	Visual Examination	Wight light 10 AM 24/6/2019
	DFO	11 AM 24/6/2019 oven temp at 100 c for 20 minutes green light for viewing
	Ninhydrin	11 AM 25/6/2019 oven temp 75 c and Humidity 65 Rh
MQPE79	Visual Examination	Visual examination of Item 1 sections A-D was performed prior to any chemical processing and after each chemical process applied to Item 1
	1,2-Indanedione	1, 2-Indanedione-Zinc (IND) was applied to Item 1 and a test print on white butcher paper (allowing IND to thoroughly soak the items) and allowed to dry completely. Item 1 and the test print (for Quality Control check of the reagent) was placed in a pre-heated/humidified environmental chamber (65% humidity and 80 degrees Celsius) for approximately 15 minutes.
	Alternate Light Source	Each section (A-D) of Item 1 was examined under TraCer Laser for any visible fluorescent friction ridge detail
MR6RU6	Visual Examination	White light and ALS
	DFO	
	Ninhydrin	
MV3DKM	Visual Examination	under white light and magnification, examined under fluorescent light
	Ninhydrin	processing in Caron chamber for 30 minutes, examined under fluorescent light
	Physical Developer (PD)	batch 467,30 minutes total, fluorescent light
MYHA87	Ninhydrin	Nincha. Temperature:45 celcius Moisture: 60%. Processing time 60 minutes
MYJWUC	DFO	
MZVX8X	Visual Examination	Item 1 was examined using oblique lighting. There were no visible prints observed.
	Ninhydrin	Item 1 was immersed in a tray of Ninhydrin solution (Novec preparation) for approximately 3 to 5 seconds and laid to air dry.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
N3YNGY	Visual Examination	
	Alternate Light Source	UV & CS @ 515nm
	DFO	placed in oven at 200F for 20 minutes
	Ninhydrin	placed in humidity chamber for 10 minutes
NAZ2EG	Ninhydrin	No-Run Ninhyrdin used, item was dipped into solution, allowed to dry, then a steam iron was used to help development. Control performed (+)
NCMM6H	Visual Examination	Used overhead lighting and a flashlight to do a visual examination of the front and back sides of the piece of paper.
	1,2-Indanedione	Sprayed item twice then put into an environmental chamber at 80 degrees Celcius and 65% humidity, for 10 minutes.
	Physical Developer (PD)	The piece of paper was put into a plastic bag containing maleic acid pre-wash for approximately 5 minutes and then into another bag containing physical developer and agitated. The piece of paper was then rinsed with water and dried on a paper towel.
NFLX2H	Ninhydrin	Environmental Chamber 85 degrees Celcius and 65% humidity for 10 minutes
	Physical Developer (PD)	Maleic acid rinse on paper; Then Physical Developer
NJJMF6	Visual Examination	With different kinds of light sources. White,sidelong, UV and blue. Neg.
	Ninhydrin	Nin with HFE. Processing 2 minutes after receiving 62% RH and 80C. Pos.
NKDBWE	Ninhydrin	Forencic Climate cabinet FKC-MK4. Temperature: 80 celcius humidity:67%. Prosesing time,about 8 minutes
NZ9P3Z	Visual Examination	Using a flashlight - scanned the paper using an Epson scanner before any chemical processing was performed.
	Ninhydrin	Ninhydrin 3. Soaked paper with Ninhydrin 3, allowed to dry and heated with a steam iron.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
P2NU8W	Visual Examination	Item was examined under magnification and white light. No prints observed.
	Ninhydrin	Item was immersed in a small tray of solution in order for the items entire surface to be completely wet (approximately 5 seconds). Item was allowed to completely dry in the fume hood. Once the CARON chamber reached 60 degrees Celsius and 60 % humidity the item was placed inside for approximately 30 minutes and then visually examined. The item appeared to have no development so it remained in the chamber for an additional 15 minutes. Item was visual examined again with no change. Item was allowed to remain in the chamber an additional 15 minutes and was removed from the chamber. Item was visually examined with magnification and white light. No prints were observed.
	Physical Developer (PD)	Processing was completed by Latent Print Technician [Name] on 07/10/19, Batch #468.
P63M4G	Visual Examination	The samples were viewed under white light with magnification with no prints observed.
	Ninhydrin	The samples were completely submerged in a tray containing ninhydrin (batch# 291) briefly, allowed to dry in a fume hood, and then placed in the Caron chamber for approximately 35 minutes at 60 degrees Celsius with 60% humidity. The samples were then viewed under white light with magnification with no prints observed.
	Physical Developer (PD)	The samples were transferred to the Latent Print Unit for Physical Developer (PD) processing. PD processing was performed by Latent Print Technician [Name] on 07/10/2019 using batch# 468. The samples were then transferred back into my custody where I viewed them under white light and magnification. No prints were observed.
P7BAMB	Visual Examination	White light -> Poly-light -> Reflected UV
	1,2-Indanedione	
	Ninhydrin	
PECPPH	Visual Examination	Visual examination under white light and magnification on June 8, 2019. No prints were observed.
	Ninhydrin	Item was placed into a container with Ninhydrin (batch #291)for approximately 5 seconds to complete wet the item. Item was then allowed to dry in the fume hood completely. The CARON chamber was preheated to 60 degrees Celsius and 60% humidity and then placed in the CARON chamber for 45 minutes on June 8, 2019. No prints were observed.
	Physical Developer (PD)	Physical Developer (batch #467) on June 12, 2019 by LPT [Name]. No prints were observed.
PKA6WW	Visual Examination	
	Ninhydrin	Process time: 5 min, Heat in cabinet: 80 degrees celsius, Humidity in cabinet: 65% rh

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
PKEHH8	Visual Examination	No friction ridges present upon visual examination.
	1,2-Indanedione	Sprayed with 1,2-Indanedione under fuming hood, placed in forensic oven for 10 minutes at 100c, 0%RH.
	Zinc Chloride	Item sprayed with Zinc Chloride under fuming hood and left to dry.
	Alternate Light Source	Item examined under alternate light source at 505nm while wearing orange goggles.
	Visual Examination	There was an "ever-so slight" area of positive processing in the center of section D that is worth noting.
	Vacuum Metal Deposition	Item processed using Vacuum Metal Deposition, gold followed by zinc for contrast.
	Visual Examination	No friction ridge detail present following processing with VMD.
PLNBA7	Visual Examination	Looked at item to see if there were any patent prints visible.
	1,2-Indanedione	Sprayed item with IND, placed in oven for approximately one hour at approximately 200 degrees, viewed item under ALS.
PM8UHJ	Visual Examination	Visual Examination completed on 6/11/19. Visual Examination under white light and magnification. No prints observed.
	Ninhydrin	Processing completed on 6/11/19. Item treated with Ninhydrin (Batch# 291) and processed in the Caron Chamber (approx. 60 degrees Celsius/ approximately 60% humidity) for 40 minutes. Item examined under white light and magnification. No prints observed.
	Physical Developer (PD)	Processing completed on 6/12/19 by Latent Print Technician [Name]. PD Batch# 467. Item examined under white light and magnification on 6/13/19 with no prints observed.
PNB7YE	1,2-Indanedione	Item 1: 1,2-Indanedione (HFE), 80 degrees, 62% RH, 5 minutes (Nincha)
PNFB93	Ninhydrin	Control was processed first using Ninhydrin (Lot #03122019SM, Exp 03/12/20) with positive results. Then the paper was sprayed with Ninydrin and let dry on clean butcher paper. Item and positive control was placed in a cleaned humidity chamber for approximately two hours. Item and control was then removed from the humidity chamber and stored in a secure locker for further processing.
PP7RR7	Visual Examination	Examend with white light and ALS (LED-flashlight), blue light (450 nm)/ yellow goggles and green light (505 nm)/ orange goggles. No print was visible.
	1,2-Indanedione	Dipped in Indanedione with zinc for a few seconds - Placed in a climachamber for 15 minutes, humidity 70% and heat 80 C. Examend with green light (505 nm LED-flashlight) and orange goggles, and print was visable in section D
	Ninhydrin	Dipped in Ninhydrin for 10 Seconds. Placed in a climachamber for 5 minutes, humidity 70% and heat 80 C. Examend with white light, but no print was visible.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
PQD9KA	Visual Examination	White light examination of exhibit as received using ambient laboratory lighting and 'Tiablo' High Power LED Flashlight at varying angles.
	Alternate Light Source	Sequential initial High Intensity Light Source (HILS) examination carried out, following dark adaptation, using Green Crime Lite 490nm-560nm with 571nm viewing filter followed by Blue Crime Lite 420nm-470nm with 476nm viewing filter and UV Crime Lite 350nm- 380nm with 408nm viewing filter. Magnifying eyeglass used where required. QA adhered to and control test piece passed.
	DFO	Carried out as per CAST validated/internally verified procedure. Treated with DFO, allowed to dry, and then placed in oven for 20 minutes at 100°C. Following dark adaptation, examined using Green Crime Lite 82S 490-560nm with 571nm viewing filter and magnifying eyeglass where required. QA adhered to throughout and control test piece passed. Ridge detail was observed in section D under green light however this was a faint mark and although ridge detail was present, the mark was treated like a live exhibit and deemed insufficient to photograph.
	Ninhydrin	Carried out as per CAST validated/internally verified procedure. Treated with Ninhydrin and allowed to dry. Treated in oven set at 62%RH & 80°C for 6 minutes. Examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass where required. QA adhered to and control test piece passed.
	Physical Developer (PD)	Carried out as per CAST validated/internally verified procedure. Ensured all solutions and room temperature >17°C. Pre-treated with Maleic Acid for 10 minutes, treated with Physical Developer Working Solution for 20 minutes followed by 3 x water rinses as per procedure. All treatment stages carried out on rockers so exhibit was constantly agitated throughout. When dry, item was examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass where required. QA adhered to and control test piece passed.
PQJJGF	Visual Examination	Initial visual exam (03.06.2019) using white light and fluorescent light sources - result negative.
	1,2-Indanedione	07.06.2019 Indandione process
	Alternate Light Source	07.06.2019 examination using Green 532nm Laser (Coherent Tracer Laser) revealed an impression on AREA D
PQZF7U	Visual Examination	Initial visual examination with white light and light source, blue and green light. No visible fingerprint.
	photography	The paper was photographed before the next development method.
	Ninhydrin	Heat 80°C, humidity 62%. Time 2 minutes. Start time when the heat and humidity has reached the right heat/temp. Teststrip positive. Visible fingerprint in section D. The fingerprint was unclear in the middle.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
Q6YUTA	Visual Examination	white light
	Alternate Light Source	poly Light 450 NM
	1,2-Indanedione	positive on part D but faint
	Ninhydrin	
	Physical Developer (PD)	
QAPDMD	Visual Examination	Oblique light.
	Ninhydrin	Acetone Base , Ninhydrin Development Oven. / Caron Oven. (Temp. 80 C , H 60%RH, 1 min.)
QDRDHW	Ninhydrin	Item was dipped into ninhydrin, hung for approximately 2 minutes to dry and then a heat source was added.
QVWCG8	Visual Examination	
	Ninhydrin	
QXXM6U	Visual Examination	Item was viewed under a magnifying glass with light.
	Ninhydrin	Applied to entire piece of paper then dried in drying hood. Heat/humidity applied in the form of steam from an iron.
QYMXX9	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Alternate Light Source	
	Physical Developer (PD)	
R37679	Visual Examination	VIS -NO USEFUL MARKS
	1,2-Indanedione	INDANDIONE MARK A LABELLED
	Ninhydrin	NO USEFUL MARKS
RA88YR	Visual Examination	Visual examination under white light and magnification on June 11, 2019. No prints were observed.
	Ninhydrin	Ninhydrin (batch #291) and processing in the CARON on June 11, 2019. No prints were observed.
	Physical Developer (PD)	Physical Developer (batch #467) on June 12, 2019 by [Name]. No prints were observed.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
RGALXV	Visual Examination	Examined visually for presence of latent prints.
	Iodine fuming	Fumed using Iodine fuming wand with negative results.
	Ninhydrin	Paper was dipped in Ninhydrin and allowed to dry overnight the Item was visually examined with negative results. Item was then steamed using a steam iron. Item was visually examined with negative results. (Test impression to QC check Ninhydrin was done prior to processing Item. QC check yielded a positive result.)
RRPPUT	1,2-Indanedione	1,2-Indanedione apply about 10 seconds. Then dry about 3 minutes. Then 20 minutes in oven at 100 centígrades degrees. Visualization of ridge details appliying forensic light between 470nm-590nm. After, apply Ninhydrin with no results.
T9PV3M	Visual Examination	I visualized the piece of paper as is, and I also used oblique lighting, ALS, UV, and LASER. It took about 5 min.
	DFO	I dipped the piece of paper twice in DFO. Once dried, I put in the oven for about 20min.
	Ninhydrin	I dipped the piece of paper in Ninhydrin. Once dried, I put in the humidity chamber for about 15min.
	Zinc Chloride	I sprayed Zinc Chloride on the piece of paper so it would react with the Ruhemman's Purple from the last processing technique. It would turn the latent impression a red/orange color. I also looked at it under the ALS.
	Physical Developer (PD)	I immersed my piece of paper in Maleic Acid first as a prewash for about 5 min. Then, I immersed my piece of paper in PD solution for about 20 min. After that is done, I rinsed my piece of paper in tap water to remove any contaminants.
TAJHFQ	Visual Examination	White ambient light. No print was detected.
	DFO	A very poor quality print was detected in section D.
	Ninhydrin	No improvement of the print.
TCRN4D	DFO	heated in 200 degrees F, by 15 min, then observed in light from range 430-515 nm, through the orange filter
	Ninhydrin	heated in 200 degrees F, by 15 min, then left for one week in sealed envelope then observed in white light
	ZnCl2	heated in 200 degrees F, by 15 min, then observed in light from range 430-515 nm, through the orange filter
THG7F4	Ninhydrin	Item dipped in HFE 7100-based ninhydrin solution-allowed to dry-allowed 7 days for development-viewed
	Physical Developer (PD)	Item soaked in maleic acid solution for approx. 5 minutes (no bubbling)-rinsed in distilled water-processed w/3 part PD solution for approx. 8 minutes (no more darkening)-rinsed with water and dried -viewed.
TKKWN4	Ninhydrin	HFE-7100 based ninhydrin

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
TXU83Y	Ninhydrin	Paper dipped in liquid Ninhydrin until paper was damp; Hung in fuming hood to air dry; Steam hand iron used for humidity held approx. 3 inches away from evidence.
U4W72A	DFO	Processed for 20 minutes at 100 Celsius in processing chamber. (Negative results)
	Ninhydrin	Processed for 10 minutes at 70 Celsius and 65% humidity in processing chamber. (Faint print observed in Area D)
U6JUBP	Visual Examination	No prints were visible when examining the material in white light.
	Alternate Light Source	Blue and green fluorescent light. No visible prints.
	DFO	20 minutes processing time. A fingerprint was visible in square "D" after DFO.
	Ninhydrin	10 minutes processing time. The fingerprint in square "D" was visible after Ninhydrin as well.
UDG6GY	Visual Examination	
	Ninhydrin	Processed paper with Ninhydrin and allowed paper to completely dry (ca. 10-15 min)before applying heat
UEBAY8	1,2-Indanedione	
UKDH6Z	Visual Examination	No visible print
	Ninhydrin	Cabinet: LabRum Klimat Ab. Time: 6 minutes, temperature: 72 celsius, humidity: 65%
UM2QU4	Visual Examination	NOTHING NOTED
	Ninhydrin	PREMIXED, SPRAYED SOLUTION ONTO PAPER. PLACED DRYING CABINET, FOR 3 MINUTES
	1,2-Indanedione	SATURATE PAPER, PLACED IN DRYING CABINET FOR 10 MINUTES
	Zinc Chloride	APPLIED AND DRIED
	Alternate Light Source	SETTING AT 505
UNWD9R	Visual Examination	
	Ninhydrin	Process time: 5 min, Heat in cabinet: 80 degrees celsius, Humidity in cabinet: 65% rh
UR3PC9	Visual Examination	Visual exam with magnification
	Ninhydrin	HFE Ninhydrin
URHD89	Visual Examination	
	Alternate Light Source	
	Ninhydrin	(80°C ± 5°, 65% Relative Humidity ± 5%, 3 min.)

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
UU4FCE	Visual Examination	White light and magnification.
	Ninhydrin	Batch 291. Placed in Nin solution, let air dry for 30 minutes, placed in Caron chamber for 1 hour.
	Physical Developer (PD)	Completed by LP Tech [Name]. Batch 467.
UUL4F9	Visual Examination	Examination with Superlite Lumatec (UV and visible spectrum), Coherent laser 532 and 577 nm.
	1,2-Indanedione	Immersion in the reactive solution then heating at 165°C during 10 s. Examination with green light (Coherent laser at 532 nm) and orange filter.
	Ninhydrin	Immersion in the reactive solution then stored during 48 hours in the dark (in a sealed plastique bag). Examination with with light.
UULCV2	Ninhydrin	
UWC6LW	Visual Examination	Initial visual inspection included both ambient light and flashlight.
	DFO	100 C for 20 min.
	Alternate Light Source	Viewed with ALS at multiple wavelengths using respective filters.
	Ninhydrin	Application of Ninhydrin and left for 24 hours for viewing. No humidity added.
UXLWTT	Visual Examination	
	Alternate Light Source	Used Crimescope
	DFO	Applied DFO and placed Item 1 in heat chamber @ 206 degrees F for 15 minutes
	Ninhydrin	Used a steam iron to apply heat and humidity.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
VDCLY9	Visual Examination	With no chemical enhancement (only eyes) and with white light (flashlight) at direct and oblique angle. No ridge structure observed
	Alternate Light Source	With no chemical enhancement (Fluorescence examination using Polylight with emission from 350 to 600 nm with viewing filters). No ridge structure observed
	1,2-Indanedione	Control tested positive prior to processing. Working solution is applied on paper (dipping 5 min). The item was allowed to dry at room temperature. it was placed in an oven for 10 minutes at 100°C and zero percent relative humidity
	Alternate Light Source	After chemical enhancement (1,2-indanedione), The paper was examined with an Alternative Light Source (ALS) using 529nm light band and orange goggles. Latent print ridge was observed in quadrant D. Ridge structure present(faint), not suitable for comparison. Photographed by DCS-5
	Zinc Chloride	Control tested positive prior to processing. The item was placed in a vented hood and sprayed with Zinc Chloride. Itwas allowed to air dry at room temperature. It was placed in an oven at 100 drgreeC with zero humidity for 20 mitues.
	Alternate Light Source	After chemical enhancement (Zinc Chloride), The paper was examined with an ALS using 529nm light band and orange goggles. Latent print ridge was observed in quadrant D. Ridge structure present(faint), not suitable for comparison. Photographed by DCS-5
	Ninhydrin	Control tested positive prior to processing. Working solution is applied on paper (dipping 2 min). The item was allowed to dry at room temperature. It was placed in the oven for 15 minutes at 80°C and 65% relative humidity. After that, it was kept in dark place and was taken out after 24 hours for further development.
	Visual Examination	After chemical enhancement (Ninhydrin), White Light was used to examine the item. Ridge structure: No collection value
	Physical Developer (PD)	Control tested positive prior to processing. The item was washed in distilled water for two minutes. It was dipped in Maleic Acid for 3 minutes. It was dipped in PD for 5 minutes. It was washed in distilled water to remove the access PD. It was allowed to dry at room temperature
	Visual Examination	After chemical enhancement (PD), White Light was used to examine the item. Ridge structure: No collection value
VDYRLU	Visual Examination	Bright light with magnification - no ridge detail visualized
	Ninhydrin	Ninhydrin HFE - Dip, Test Print +, Humidity Chamber #1 for 60 minutes, ridge detail visualized in section D
	1,2-Indanedione	IND - Dip, Test Print +, Caron Chamber #3 (30 minutes 100C without humidity), ridge detail visualized with LASER in section D
VMZGW4	iodine vapors	Iodine vapors are applied consecutively into sections (A, B, C and D) on white office paper.
	Ninhydrin	Ninhydrin spray applied

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
VUJD87	[No Methods Reported.]	9:15 dipped paper into DFO (EIP13019). Let dry. 1000 examine unde forensic laser. No prints. 1005 dipped into Ninhydrin. Let dry. 1015 put in heat chamber for 20 min. No prints. Test +
VUZBCV	Visual Examination	TracER Laser with orange filter
	DFO	20 min incubation, TracER Laser with orange filter
	Ninhydrin	6 min incubation
VWXNY	Visual Examination	
	Ninhydrin	Heptane Ninhydrin was applied on: 6/25/2019 (dried for at least one hour).
	Caron Chamber	Caron Chamber was used to further develop prints.
VWP9JV	Visual Examination	White light and fluorescence examination 350nm-650nm with appropriate edge filters
	DFO	Item dipped in the liquid, heated in oven for 15 minutes at 95C examine with 505 nm and orange filter
	Ninhydrin	Item dipped in the liquid, heated in oven for 10 minutes at 70C, 60% Rh examine with white light
VZLRPZ	1,2-Indanedione	Sprayed with 1,2, Indanedione, Allowed to air dry, Placed in heating chamber at 100 degrees 0% humidity for 10 minutes, Sprayed with Zinc Chloride and allowed to dry.
	Alternate Light Source	Examined under alternate light source at 505 nm wearing orange glasses. Observed slight area of positive processing at center of area D. No friction ridges present.
	Vacuum Metal Deposition	Placed item in VMD Machine, drawn vacuum down to specifications, vaporized gold and then developed with Zinc. No further enhancement was observed.
W86QW7	Visual Examination	Ambient, UV, Tracer
	DFO	100 Degrees C, 20 minutes processing time
	Ninhydrin	80 Degrees C, 65% humidity, 2 minute processing time
	Physical Developer (PD)	Processing time approx. 15 minutes
WCELJA	Visual Examination	
	Ninhydrin	
WEMJB6	Visual Examination	Wight Light 10 AM 24/6/2019
	DFO	11 AM 24/6/2019 Oven Temperature 100 C for 20 Minutes Green Light for viewing
	Ninhydrin	11 AM 25/6/2019 Oven Temperature 75 C and Humidity 65 Rh

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
WLQ7Y6	Visual Examination	6-6-19 Visual examination of Item 1 under white light and magnification. No prints observed.
	Ninhydrin	6-6-19 Item 1 processed with Ninhydrin, batch 291 and then air dried. Further processing in the caron chamber. No prints.
	Physical Developer (PD)	6-12-19 Processed Item 1 with Physical Developer, batch 467 and then air dried. No Prints.
WR7DF4	Visual Examination	
	Alternate Light Source	White (400-700 nm), blue (430-470 nm) and green (480-560 nm) light.
	DFO	25 minutes processing time. 100 degrees celsius. Dye stain based on HFE-solution.
	Alternate Light Source	Light source green light visualisation.
	Ninhydrin	5 minutes processing time. 80 degrees celsius. 65% humidity. Dye stain based on HFE-solution.
WUZKXZ	1,2-Indanedione	1,2-Indanedione-Zinc Chloride. Heat applied with a heat press @ ~160 degrees C for 10 seconds. Viewed with LASER at 532nm with orange barrier
	Ninhydrin	Heat and humidity applied using a steam iron
WVALJY	1,2-Indanedione	
	Laser	@532nm with orange barrier
	Ninhydrin	
WY9KWR	Visual Examination	Visual inspection
	1,2-Indanedione	applied indanedione Print developed w/ indanedione.
	Ninhydrin	ninhydrin (left overnight).
	Visual Examination	Visual inspection. No further analysis.
WZL8CJ	Visual Examination	Crimelite white, UV
	1,2-Indanedione	160°C (press), 10 sec
	Ninhydrin	Room Temperature (locker with humidity), 48h
XFALAP	Ninhydrin	Dipped in ninhyrin solution, then left to dry. In oven for 8 minutes in 70 degree C and 70% Rh.
XK83P6	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Physical Developer (PD)	

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
XXG2TQ	Visual Examination	Used white light to examine on 06/12/19.
	1,2-Indanedione	Applied 1,2 Indanedione-Zinc Chloride, heated in oven at 100 degrees Celsius for 10 minutes, then viewed under laser light @ 532 nm with orange barrier on 06/12/19.
	Ninhydrin	Applied Ninhydrin, applied steam from iron, then conducted visual examination on 6/13/19.
XYQNBJ	Ninhydrin	
Y2TMX3	Visual Examination	Item 1 was examined with white light and magnification. No prints were observed.
	Ninhydrin	Item 1 was treated with Ninhydrin batch # 291. Item 1 was processed in the CARON. A print was observed on quadrant D.
	Physical Developer (PD)	Item 1 was treated with PD batch # 467. No prints were observed.
Y339GW	Ninhydrin	Heat/Humidity chamber
Y3JXPV	Visual Examination	Ambient light and flashlight
	Ninhydrin	Humidity chamber for 30 minutes
	Physical Developer (PD)	Processing time -- 50 minutes
YEEKNY	Visual Examination	
	Alternate Light Source	
	1,2-Indanedione	
	Physical Developer (PD)	
YJMWN7	Visual Examination	No ridge detail observed.
	1,2-Indanedione	Processing Time: 1 hour; Viewed with forensic light source at 515nm using an orange barrier filter. Ridge detail preserved from center of Quadrant D (front lower right side of paper)
	DFO	Processing Time: 1 hour; Viewed with forensic light source at 475nm using an orange barrier filter. Ridge detail preserved from center of Quadrant D (front lower right side of paper)= same ridge detail preserved as with Indanedione process.
	Ninhydrin	Processing Time: 1 hour; No additional ridge detail preserved.
YK7JMN	Ninhydrin	Ninhydrin, + Control, Lot: 03122019SM, EXP: 3/12/2020, 40 minutes in humidity chamber, 24 hours in locker

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
Z3GR2T	Visual Examination	Initial visual examination performed under white light, a CrimeScope CA-16-500 Alternate Light Source, and a TracER LASER.
	1,2-Indanedione	A HFE-7100 based 1,2-Indanedione solution was sprayed onto the item, and placed under a heat press for approximately 15 minutes, then viewed under a TracER LASER at 532nm.
	Ninhydrin	A HFE-7100 based Ninhydrin solution was sprayed onto the item, and a steam iron was held over the item for approximately 10 minutes, then viewed under white light.
Z3V97U	1,2-Indanedione	Humidity 65%, temperature 65 degrees, time 30 minutes. Machine: Attestor Forensics Nincha M31. Service: 29.1.2019.
Z4B4R8	Visual Examination	06/03/2019. LED white light and magnification
	Ninhydrin	06/03/2019. Batch 291. Processing in the CARON chamber for 60 minutes. LED white light and magnification
	Physical Developer (PD)	06/12/2019. Batch 467. LED white light and magnification
Z94CTT	Visual Examination	Oblique lighting, ALS, RUVIS
	Ninhydrin	Manual humidity
	Visual Examination	Oblique lighting, ALS, RUVIS
	Visual Examination	examined over two day period
ZA2ZGD	1,2-Indanedione	
ZAWK2R	Visual Examination	No fingerprint. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white.
	DFO	Disclosing a fingerprint. The fingerprint is visible in the light source 505 nm with orange goggles.
	Ninhydrin	No improvement in fingerprint quality after use Ninhydrin. The fingerprint is not visible.
ZEVW74	Visual Examination	Natural light, white light, optical instruments.
	Alternate Light Source	Polilight PL 500, barrier filters, optical instruments.
	1,2-Indanedione	Processing time: 10 minutes, temperature: 90°C.
	Alternate Light Source	Polilight PL 500 (505-530 nm light), orange barrier filter, optical instruments.
	Ninhydrin	Processing time - 72h, room temperature, dark place.
	Visual Examination	White light, optical instruments.
	Vacuum Metal Deposition	Gold/zinc process (chamber pressure: between 2 x 10-4 and 5x10-4 mbar).
	Visual Examination	White light, optical instruments.

TABLE 2 - Item 1

WebCode	Development Methods	Method Details
ZJL7F3	Visual Examination	White light 10 AM 24/6/2019
	DFO	11 Am 24/6/2019 oven temp 100 c for 20 minutes green light viewing
	Ninhydrin	11 Am 25/6/2019 oven temp 75 c and humidity 65 Rh
ZLAKXK	1,2-Indanedione	The evidence has been submerged in 1,2 indanedione zinc chloride during 8s. Then, the evidence has been put in the oven with temperature 100°C amd without humidity during 20 minutes.
	Ninhydrin	The evidence has been submerged in Ninhydrin petroleum ether during 8s. Then, the evidence has been put in the oven with temperature 80°C and 62% of humidity during 20 minutes.
ZMMCTM	Visual Examination	bright white light was utilized.
	Ninhydrin	dip method; performance check conducted on NIN: 6/10/19 (passed)
	Heat and Humidity	steam iron applied until reaction observed
ZQ3Y7R	Visual Examination	07-19-19/1430 visual examination of evidence item
	Ninhydrin	07-19-19/1440 ninhydrin solution preparation, pos/neg controls, application A-D. 07-23-19/1115 final observation of ninhydrin development

Response Summary

Participants: 268

Methods Utilized

Alternate Light Source	82	Physical Developer	58
Cyanoacrylate Fuming	1	Powder Dusting	1
DFO	57	Visual Examination	233
Dye Stain	0	Wet Powder Suspension	0
Ninhydrin	230	1,2-Indanedione	81

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

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
239ENG	Visual Examination	"2A" (adhesive side only) examined visually on 07/12/2019 - 1205 hours. No ridge detail visible.
	Sticky Side Powder	"2A" (adhesive side only) processed with sticky side powder on 07/12/2019 - 1206 hours. No ridge detail developed.
	Visual Examination	"2B" (adhesive side only) examined visually on 07/12/2019 - 1208 hours. No ridge detail visible.
	Sticky Side Powder	"2B" (adhesive side only) processed with sticky side powder on 07/12/2019 - 1209 hours. No ridge detail developed.
	Visual Examination	"2C" (adhesive side only) examined visually on 07/12/2019 - 1211 hours. No ridge detail visible.
	Sticky Side Powder	"2C" (adhesive side only) processed with sticky side powder on 07/12/2019 - 1212 hours. No ridge detail developed.
	Visual Examination	"2D" (adhesive side only) examined visually on 07/12/2019 - 1214 hours. No ridge detail visible.
	Sticky Side Powder	"2D" (adhesive side only) processed with sticky side powder on 07/12/2019 - 1215 hours. One fingerprint impression was developed. An evidence quality 1:1 photograph was taken of the fingerprint impression.
26ZBDB	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Wet Powder Suspension	Black
	Dye Stain	Ardrox
28T3R3	Visual Examination	
	Cyanoacrylate Fuming	Cyanoacrylate only used on non-adhesive side (standard procedure) with 24 hour setting.
	Powder Dusting	Magnetic Powder used on non-adhesive side.
	Gentian Violet	Gentian Violet used on adhesive side.
28UHV8	Visual Examination	white light and magnification
	Cyanoacrylate Fuming	cyvac 40 minutes
	Dye Stain	gentian violet
	Wet Powder Suspension	black wetwop
	Dye Stain	ray
2BAMCW	[No Methods Reported.]	My unit does not process silver duct tape (adhesive side) such as Items 2A, 2B, 2C and 2D, therefore, I was unable to complete the Item 2 section of this examination.
2KCPU9	Alternative black powder	Alternative black powde,woter and liquid detergent oll 50 with 50

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
2T6MCM	Wet Powder Suspension	Wet powder black applied with camel hair brush, left on for 15 sec and then washed off and allowed to air dry
2UF84Q	Wet Powder Suspension	Treat adhesive side with wet powder suspension (black), rinse with water, dry
2W77JA	Wet wop on adhesive part	Fume extraction hood for wetwop to dry / photograph
2WP89X	Visual Examination	Light and magnification were used. Control test was not applicable. No ridge structure was observed on non-sticky side of tape. Sticky side of tape was left on sheet to protect it until later processing.
	Alternate Light Source	LabKam that emits 254 nm of light was used. Control test was not applicable. No ridge structure was observed on non-sticky side of tape.
	Cyanoacrylate Fuming	Control test was positive. No ridge structure was observed on non-sticky side of tape.
	Alternate Light Source	LabKam that emits 254 nm of light was used. Control test was not applicable. No ridge structure was observed on non-sticky side of tape.
	Dye Stain	Rhodamine 6G was used. Control test was positive. No ridge structure was observed on non-sticky side of tape.
	Alternate Light Source	Crimescope was used at various wave lengths with orange goggles. Control test was not applicable. No ridge structure was observed on non-sticky side of tape.
	Powder Dusting	Black Powder was used. Control test was not applicable. No ridge structure was observed on non-sticky side of tape.
	Wet Powder Suspension	Black Wet Powder was used on the sticky side of the duct tape. Control was not applicable. Ridge structure of collection value was observed on the piece of tape labeled "D". Digital photography was used for collection.
2ZPQJP	Wet Powder Suspension	Wet Wop powder applied with camel hair brush. Allowed to set for 1 minute then rinsed with clear water.
39TWFX	Visual Examination	
	Alternate Light Source	LAS, UV, CS
	Wet Powder Suspension	ABP

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
3DU74Y	Cyanoacrylate Fuming	06/28/2019: Cyanoacrylate Fuming Chamber(CFC) Processing: Before Processing: Filter Cycles - 191, Total Cycles - 675. Last Time Cleaned/Pre-filter Changed - 672/649. Cleaned prior to starting processing. Target Humidity Value - 70%. Purge Time - 10:00 minutes. Maximum Fume Cycle Time - 10:00 minutes. CFC Processing Start Time - 1727 hours. Target Humidity Value Reached/Fuming Cycle Started - 1731 hours. Fuming Cycle Ended/Purge Cycle Started - 1741 hours. Purge Cycle Ended/CFC Processing Completed - 1751 hours. Cyanoacrylate (+)Control - Lot#: UR18419, Exp: 10/19
	Powder Dusting	06/28/2019: Bi-Chromatic Powder Processing: Non-adhesive side. Bi-Chromatic powder and fingerprint brush - Start Time - 1755 hours, End Time - 1801 hours
	Wet Powder Suspension	06/28/2019: Black WetWop Processing. Black Wetwop (+)Control - Exp: 5/23/28. Start Time - 1808 hours, End Time - 1818 hours. 07/01/2019: Additional black WetWop processing completed on silver piece of duct tape with the letter "D" after initial preservation/recovery photographs had been captured. Black Wetwop (+)Control - Exp: 5/23/28. Start Time - 1600 hours, End Time - 1605 hours
3KCRYN	Visual Examination	White light & ambient
	Alternate Light Source	Laser @ 535nm
	Wet Powder Suspension	Black wetwop
3T3U2E	Visual Examination	Examined with oblique lighting, ALS with orange goggles, UV lamp, and LASER with orange goggles.
	Gentian Violet	I dipped the adhesive side of the duct tape in gentian violet and then rinsed the item under water.
	Wet Powder Suspension	I used Black wetwop which I painted on the adhesive side of the duct tape and then rinsed the item under water.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
3UV9HH	Visual Examination	Visual examination under white light and magnification.
	Cyanoacrylate Fuming	Completed on the non-adhesive side. Cyanosafe set up with 4 drops of cyanoacrylate in three (3) small metal cups on a hot plate, distilled water well filled, and test print placed inside. Chamber ran for 12 minutes followed by the Purge process. Process complete and item allowed to dry for one (1) hour. Test print positive.
	Gentian Violet	Gentian Violent batch #69. Completed on the adhesive side. Item immersed in solution and agitated for approximately 30 seconds. Item removed from solution and rinsed under cold water until all excess solution was off. Item allowed to dry completely.
	Wet Powder Suspension	Black wet wop completed on the adhesive side. Wet wop applied with a brush and painted on item. Wet wop allowed to stay on for 10 to 20 seconds then rinsed under cold water until all excess wet wop was off. Item allowed to air dry completely.
	Powder Dusting	Black powder applied to the non-adhesive side with a brush.
	Dye Stain	RAY batch #700 completed on non-adhesive side. Item completely covered in RAY stain for approximately one (1) minute, rinsed under water until all excess solution was removed, patted dry with a paper towel, and allowed to air dry completely.
3UWHLV	Visual Examination	White and UV light.
	Wet Powder Suspension	Black Wet Powder, about 20 s.
3XFF8Z	Visual Examination	
	Alternate Light Source	365nm, 450nm, 532nm
	Wet Powder Suspension	
3ZK69N	Visual Examination	nothing
	Cyanoacrylate Fuming	non-sticky side, nothing
	Wet Powder Suspension	sticky (glue) side of tape, detected print
473XWT	Visual Examination	No latent print impressions observed.
	Wet Powder Suspension	Black colored Wetwop developer applied with camel hair brush. Left on tape for approximately 15 seconds and then rinsed under light running water. Enhancement observed and photographed.
49ZML2	Alternate Light Source	Tracer 532 nm (green light) for inherent fluorescence and was positive.
	Gentian Violet	application through solution multiple times.
	Wet Powder Suspension	Powder in suspension black (PSB) applied solution 10-15 seconds.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
49ZP9K	Wet Powder Suspension	Visual exam with FLS on all four squares of tape, no visible ridge detail found. Application of wet powder to the adhesive sides of all four squares of tape. Wet powder tested prior to being applied, and performed as expected.
4AM3FN	Wet Powder Suspension	Black Wetwop
4APPW3	Visual Examination	No prints were observed.
	Wet Powder Suspension	Black wet-wop was the reagent used on the sample as well as a QC I made.
	Visual Examination	No prints were observed on any pieces of tape, but prints were developed on the QC.
	Wet Powder Suspension	I processed the pieces of tape again with black wet-wop as well as a new QC.
	Visual Examination	Again, prints developed on the QC but not on any pieces of tape.
4HWDLU	Wet Powder Suspension	Applied Wetwop Black on Adhesive side, wait for 2 mins, rinse with water. Let it dry for 30 mins then photographed
4KB2JT	Visual Examination	Oblique and direct lighting
	FSIS	Shortwave UV light and specialized filter
	Wet Wop (Black)	Painted on with brush and then rinsed with cold water
4QUHUH	Visual Examination	
	Black Sticky-Side Powder	Black Sticky-side powder and Photo Flo. Control was used and tested positive.
4RRAUQ	Visual Examination	Ambient and oblique LED
	Cyanoacrylate Fuming	Non sticky side
	Powder Dusting	Both Magnetic and black powder
	Wet Powder Suspension	Black stick side powder. Latent found on sticky side.
4UV3L4	Wet Powder Suspension	Applied wetwop for 15 seconds then rinsed with water, repeated twice
629FZT	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	
63PT3P	Visual Examination	Visual examination of the adhesive sides of tape A-D, no prints observed.
	Wet Powder Suspension	Applied black Wetwop to the adhesive side of the tape and let stand for approximately 10 seconds. Rinsed with water.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
6BZADW	Visual Examination	fluorescent lighting
	Cyanoacrylate Fuming	cyanosafe, fluorescent and LED lighting
	Dye Stain	Gentian violet batch 061, fluorescent lighting
	Wet Powder Suspension	black wet wop, fluorescent lighting
	Dye Stain	RAY batch 698, ALS Crimelite ML2 450nm with orange filter, ridge detail observed on "D"
6FLQNF	Visual Examination	white light , natural light and UV light (350nm). No fingerprint observation
	Cyanoacrylate Fuming	both sides. No fingir prin observation.
	Powder Dusting	magnètic blitz green in the no adhesive side. no fingerprint observation
	Wet Powder Suspension	EZFLO. No fingerprints observation
6MUQ3W	Visual Examination	Tracer, Rofin Blue/ Green Light Source
	Cyanoacrylate Fuming	Misonix fume chamber, Amb. Lights
	Cyanoacrylate Fuming	(LUMI) CApture-BT fume chamber, Rofin Green Light Source
	Dye Stain	Gentian Violet, Amb. Lights
6TVK4Y	Visual Examination	Examined adhesive side with flashlight and ambient room light
	Wet Powder Suspension	Lightly brushed with sticky side powder and rinsed after 30 seconds.
6WW8YN	Visual Examination	Item 2 is stored in a 8x10 manila envelope with a red strip of evidence tape with "CTS" written on it. Item 2 was observed to be a white, square piece of wax paper with four small strips of silver duct tape marked A through D.
	Wet Powder Suspension	The adhesive side of each strip of tape was treated with adhesive side powder which was mixed with Kodak Photoflo and applied to the strips. No friction ridge patterns were developed or observed.
	Cyanoacrylate Fuming	The pieces of duct tape were fumed with Cyanoacrylate in a fuming chamber with a relative humidity of 80% for twenty minutes. No friction ridge patterns were developed or observed.
6XPGTP	Visual Examination	06/03/2019 at 1302 hours. Negative result
	Alternate Light Source	06/03/2019 at 1310 hours. Green Laser 532 nm used an orange filter. Negative result
	Wet Powder Suspension	06/03/2019 at 1333 hours. Wet Wop. Formula WW 04-05-19. Ridge detail present on the back of duct tape labeled "D"

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
6XU4EQ	Liquid Nitrogen	Used to separate pieces of tape from waxy paper
	Visual Examination	With ambient light and a flashlight
	Wet Powder Suspension	Black Wetwop, left on tape for approximately 2 minutes before rinsing with cold tap water
6YQH7P	Visual Examination	I performed a visual examination on adhesive side of the four pieces of duct tape. I did not observed any ridge detail.
	Wet Powder Suspension	I removed the four pieces of duct tape from the sheet and applied black Wetwop to the adhesive side. I left the Wetwop on the adhesive side for approximately 45 seconds. I then rinsed off the Wetwop with water. I observed ridge detail on piece D.
6ZW4FN	Cyanoacrylate Fuming	Processing time = approximately 20 mins. CFC chamber at 70% humidity - 10 min. cycle followed by 10 min. purge cycle. CFC positive control tested +. Lot #UR18419 Exp 10/2019
	Powder Dusting	Processing time = approximately 5 mins. Biochromatic powder using to process the non-adhesive sides of silver duct tape (A-D)
	WetWop	Processing time = approximately 10 mins. Black Wetwop used to process adhesive sides of silver duct tape (A-D). Wetwop positive control tested +. Catalog #1-0077 Exp 05/23/2028
73EDUL	Visual Examination	White light/ALS/Laser. Negative.
	Wet Powder Suspension	Black wetwop applied with camel hair brush. Rinsed after 1 minute. Faint ridges developed on D.
76LDCL	Visual Examination	visual exam with magnification
	Wet Powder Suspension	black Wetwop
7FLBNN	Visual Examination	No visible print
	Wet Powder Suspension	Black Wet Powder
7LUTPF	Visual Examination	Notepage photography
	Wet Powder Suspension	Black sticky-side powder, set 30 seconds, rinse with water
7P98WG	Visual Examination	direct and siding lighting
	Alternate Light Source	view between 455-515. UV lighting flash light
	Wet Powder Suspension	apply to adhesive then sit 10-15 seconds then cold water rinse
7PP9WX	Wet Powder Suspension	1. Visual examination white light, mini-crimescope and crime-lite 42S. 2. Black Wet powder. 3. Visual examination with white light and mini-crimeskope and crime-lite 42S

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
7R2VGX	Visual Examination	
	Alternate Light Source	(495 nm)
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Wet Powder Suspension	Black
	Dye Stain	Ardrox
7XMT6K	Visual Examination	A visual examination was conducted using oblique lighting.
	Wet Powder Suspension	Item 2 was processed with a Wet Powder Suspension application also known as a Sticky Side Powder Kit. The application was brushed on the adhesive side of the tape and allowed to rest for 15 seconds. The tape pieces were then rinsed under running water. Lot # 1-2722 Powder. Lot # 146-4510 Photo Flo. Test Prints were positive.
	Visual Examination	A second visual examination was conducted. Item D was observed to have a fully developed print. Items A, B, & C displayed no prints.
839ARU	Wet Powder Suspension	a little white wet powder among black wet powder
83E4PN	Visual Examination	
	Black Sticky Side Powder	Black Sticky Side Powder applied (10-20 seconds) and rinsed with water
8B6ZGC	Visual Examination	
	Alternate Light Source	white light, ALS 425-530nm
	Wet Powder Suspension	Sirchie Adhesive Side Developer (Dark), two (2) applications.
8DXW76	Visual Examination	
	Alternate Light Source	
	Dye Stain	Crystal Violet (Forensic Laser)
8DZ8WM	Visual Examination	Oblique lighting with magnification
	WetWop	Using a paint brush, I applied Black wetwop to the adhesive side of the tape and rinsed it away with tap water.
8LA4NU	Visual Examination	VIS, UV, none fingerprint
	Cyanoacrylate Fuming	aprox. 2 min, 120 degree C
	Wet Powder Suspension	Wet Powder black, fingerprint - section D
	Dye Stain	Basic Yellow 40
8REWUJ	Wet Powder Suspension	Powder Suspension Carbon applied to adhesive surface of the silver tape pieces. Batch no. WP180126.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
8UMKDZ	Visual Examination	This was completed using white light and magnification. If a print is observed it will be photographed.
	Cyanoacrylate Fuming	Item is placed within the cyanosafe chamber. 4-5 drops of glue is placed in each tin and then the tin is placed on the heat plate. The water area is checked to make sure there is sufficient water to create the proper humidity amount in the chamber. A test print is placed within the chamber to make sure it is functioning properly. The chamber runs for 12 minutes and then goes into a purge cycle. The item then sits for 1 hour to harden the superglue. Once the hour has expired the test print is checked and then the item is examined using white light and magnification. If a print is observed it will be photographed.
	Gentian Violet	Item is submerged in the solution and agitated for 30 seconds. The excess gentian violet is then rinsed with cold water. The item is then allowed to dry. Once dry, the item is examined using white light and magnification. If a print is observed it will be photographed.
	Wet Powder Suspension	Black wetwop is used. The bottle should be shook and then dumped into a weight boat to prevent contamination. The wetwop is then painted onto the item. It should be left on the item for 10-20 seconds. The excess is then rinsed off in cold water. The item is then air dried. It is then examined with white light and magnification. If a print is observed it will be photographed.
	Powder Dusting	Black magnetic powder will be applied on the non-adhesive side. The item is then examined with white light and magnification. If a print is observed it will be photographed.
	Dye Stain	RAY is applied to the non-adhesive side of the tape. The item can be dipped or painted on. It should remain on the item for approximately 1 minute. The excess dye is then washed off with tap water. The item is patted to remove excess water and then air dried. The item is then examined with a fluorescent light source. Using an orange filter. If a print is observed it will be photographed.
8WRRJT	Wet Powder Suspension	1.Painting Wet Powder(black) to the adhesive side of a tape (Item2) with a brush. 2.Rinsing the excess off with tap water after leaving it on the tape for 10 to 15 seconds.
8WT74L	Wet Powder Suspension	Freshly prepared Sticky-side reagent. Development time approx. 3 minutes.
8X4RTM	Cyanoacrylate Fuming	Visual examination. Positive control of Cyanoacrylate conducted with appropriate results (Lot:UR18419, exp:10/2019). Item of evidence subjected to one cycle in a fuming chamber (10 min fume cycle, 10 min purge cycle at 70% humidity)
	Wet Powder Suspension	Positive control of Wetwop conducted with appropriate results (exp:05/23/2028). Brush application. Light rinse - allow to dry

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
983NTP	Tweezers	Tweezers to remove duct tapes from thin paper that they were attached.
	Visual Examination	Visual examination with alternate light source and magnifying glass, no findings.
	Wet Powder Suspension	Black WetPowder, finding (half of print) in sample D.
987M9X	Visual Examination	White light and magnification
	Cyanoacrylate Fuming	CyanoSafe Recirculation Chamber (Crime Scene Unit, 12 minute run time, test print positive), LED light and magnification
	Gentian Violet	Batch #69, LED light and magnification
	Wet Powder Suspension	Black Wetwop, LED light and magnification
	Powder Dusting	Black magnetic powder, LED light and magnification
	Dye Stain	RAY; Batch #696; examination using Foster + Freeman Crime Lite ML with a 460nm-510nm bandwidth filter and orange barrier
9DVGFQ	Visual Examination	forensic light source
	Wet Powder Suspension	(carbon black suspension) immersion bath and rinsing
9FWRZT	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	
9HQWWR	[No Methods Reported.]	(1) Visual Examination with oblique magnified lighting. (2) Wet-Wop (black).
9JXVUZ	Visual Examination	White light and magnification - no lats
	Alternate Light Source	Exam laser/orange filter - no lats
	Cyanoacrylate Fuming	Fumed then examined with RUVIS and oblique light - no lats
	Powder Dusting	Non-adhesive side of duct tape processed with black magnetic powder - no lats
	Dye Stain	Non-adhesive side of duct tape sprayed with RAM (Rhodamine 6G/Ardrox/MBD mixture), dried, and examined with ALS (laser/UV) - no lats
	1,2-Indanedione	Dipped in IND; allowed to dry; 20 mins in heat/humidity (80 degrees/65%) chamber - examine with laser; 1D - Photo; others - no lats
	Ninhydrin	Dipped in NIN; allowed to dry; 20 mins in heat/humidity (80 degrees/65%) chamber; visual exam - no lats
	Physical Developer (PD)	Set in succession in DI water /maleic acid /PD working solution /water rinse in a tray on an orbital shaker for 5 to 10 mins each; visual exam - no lats
	Wet Powder Suspension	Noted requirement for adhesive processing: Removed squares with UnDu; Brushed WetWop (black)on adhesive side for a minute and rinsed in cold water; visual exam - no lats

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
9U36XX	Visual Examination	Ambient Lighting Tracer Laser; 505nm with orange goggles
	Gentian Violet	Submerged in GV solution 3 times and rinsed with water
	Wet Powder Suspension	Wet Powder - Black Brushed onto item, allowed to sit for 10 seconds and rinsed with water
ABJ7U8	Visual Examination	Flashlight, LASER, UV
	Gentian Violet	
	Wet Powder Suspension	Wetwop used
AFRU6M	Visual Examination	
	Alternate Light Source	365nm, 450nm, 532nm
	Wet Powder Suspension	Black WetWop
AG7WEG	Visual exam, Rhodamine 6G, Crystal Violet, Black powder	Visual exam - white light. Rhodamine 6G - dye stain w/visual exam under green laser. Crystal violet - dipped for 1 min, air-dried & visual exam w/whtie light. Black powder - visual exam w/white light
AJWNJD	Visual Examination	Examined with white light and magnification on 06/04//19
	Cyanoacrylate Fuming	Examined with white light and magnification on 06/04/19
	Dye Stain	Gentian Violet on 06/09/19, Batch #69. Submerged in gentian violet and rinsed with water. Examined with white light and magnification
	Wet Powder Suspension	Sticky side powder on 06/09/19, Batch 228, used on both sides of the tape then rinsed with water. Examined with white light and magnification
	Dye Stain	RAY on 06/09/19, Batch 698,used on non-sticky side, examined with Pollilight 450nm and orange filter
ALGAVF	Visual Examination	
	Wet Powder Suspension	Used Black Wet Powder on adhesive side of the tapes. Put it on, let it sit for 2 minutes, then rinsed off with tap water. Print was found on Tape "D".
AN7KQE	Wet Powder Suspension	Wetwop Black- applied on the sticky side and rinsed with water, time estimation
ANLYYN	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	
	Visual Examination	
APZ6Y6	Visual Examination	under different types of light
	Wet Powder Suspension	black wetwop, 15 seconds

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
AR8J8Y	Visual Examination	
	Wet Powder Suspension	
AY6E2Q	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	
B2P7LD	Visual Examination	A visual examination of items completed prior to administering chemical development methods.
	Wet Powder Suspension	All four (4) squares gently lifted from waxed paper using tweezers, then brushed with wet powder solution. For visualization, squares were gently rinsed with water.
B2QU9H	Visual Examination	Natural light & magnification
	Wet Powder Suspension	Sticky-Side Powder was painted onto the adhesive side of pieces A-D, left for approximately 15 seconds, & rinsed with cold tap water. This process was conducted two times for each.
B3LGPT	Visual Examination	Ambient lighting and green/Tracer laser
	Gentian Violet	dipped in GV solution 3 times and rinsed with water
	Wet Powder Suspension	brushed on item and rinsed with water
B3LJCC	Visual Examination	No latent prints observed.
	Wet Powder Suspension	Wetwop. Latent prints developed.
	[No Methods Reported.]	Crystal violet. No further latent prints developed.
B6N4WK	Wet Powder Suspension	Wetwop for 1 min and rinsed with distilled water
B7GRJM	Visual Examination	
	Wet Powder Suspension	
B9QTL7	Visual Examination	Visible reflection + fluorescence (alternate light source). Room temperature = 24°C. Relative humidity = 74 %
	Wet Powder Suspension	Wetwop. Room temperature = 24°C. Relative humidity = 74 %
	Visual Examination	Visible reflection (alternate light source). Room temperature = 24°C. Relative humidity = 74 %
BQNHTF	Wet Powder Suspension	Wet Powder black was applied with brush, left on for approximately 15 seconds, and rinsed off with cold water.
BWHUX8	Visual Examination	side lighting with white light
	Alternate Light Source	Wavelengths 415nm, 450nm, 505nm, & 530nm
	Wet Powder Suspension	Adhesive side developer (2 applications over 16 minutes)

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
C2A6HB	Wet Powder Suspension	Black Wet Powder and Sticky Side Powder
C47AWB	Wet Powder Suspension	
C4BP9B	Visual Examination	white light, UV - 555 nm - Polilight PL 500, suitable googles
	Wet Powder Suspension	
	Visual Examination	white light
C7X9CU	Visual Examination	White light/ALS
	Cyanoacrylate Fuming	
	Dye Stain	R6G, Laser
	Powder Dusting	Magnetic powder
	Wet Powder Suspension	Sticky Side Powder
C88VKD	Visual Examination	Ambient light
	Alternate Light Source	Foster + Freeman Crime-lite ML2. Green 480-560 nm and Blue 420-470 nm. No filter, red filter, orange filter, and yellow filter
	Wet Powder Suspension	Wet Powder-Black. Approximately ten (10) seconds followed by a cold water rinse
	Visual Examination	Ambient light
	Alternate Light Source	Foster + Freeman Crime-lite ML2. Green 480-560 nm and Blue 420-470 nm. No filter, red filter, orange filter, and yellow filter
CA4KGB	Visual Examination	Used a flashlight with white light and ambient lighting.
	Wet Powder Suspension	Used Black Wetwop, applied on adhesive sides of pieces of tape and allowed to sit for approximately ten seconds before rinsing wetwop off with tap water. Used a flashlight and ambient lighting to examine the tape.
	Visual Examination	Used a flashlight with white light and ambient lighting.
CFNP63	Removal of the four pieces of silver duct tape from the sheet	Removal with stainless steel tweezer
	Visual Examination	Under different types of light
	Wet Powder Suspension	Apply the wet powder suspension (wetwop) with a brush on the adhesive sides of the four pieces of silver duct tape. Waiting for 10 seconds and after rince under a small water trickle. observation under white light
CJM3TU	Visual Examination	In daylight and flashlight fingerprint and in spectrum of Polilight PL 500 (415, 450) fingerprint has been disclosed in section - D
	Wet Powder Suspension	Improved fingerprint quality has been achieved

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
CPAVWG	Visual Examination	With different kinds of light sources. White, sidelong, blue and green. Neg.
	Cyanoacrylate Fuming	On the not adhesive side (adhesive side was protected with plastic). Processing time 10 min, 2 g CNA, Rh 80%. Neg.
	Wet Powder Suspension	WP Black on the adhesive side. Pos.
CQ9GTY	Visual Examination	Using white light and magnification, item was examined for prints.
	Alternate Light Source	Using a Crime Lite ML2 (420nm-470nm, orange filter), item was examined for prints.
	Cyanoacrylate Fuming	Using the Air Science SafeFume 1, item was processed for 20 minutes and allowed to set for 1 hour. (A test print developed) Item was then examined for prints.
	Gentian Violet	Item was soaked/agitated in gentian violet batch #69 for approximately 3 minutes, rinsed off with cold tap water and allowed to dry. Item was examined for prints.
	Wet Powder Suspension	Both the adhesive side and non-adhesive side of item was processed with black wetwop, rinsed off and allowed to dry. Item was examined for prints.
	Dye Stain	Item was was dipped into a dish with R.A.Y. batch #698, rinsed off and allowed to dry. Item was examined for prints.
CYXQXH	Wet Powder Suspension	Black Wet Powder Brush
D3FN36	Wet Powder Suspension	Adhesive sides of tape processed SSPB (Sticky Side Powder Black) for 15 minutes.
D62QQP	Visual Examination	A visual examination was conducted with forensic light sources using wavelengths form 450 nm to 650 nm as well as with white light. A green laser (Tracer) was used to check for inherent fluorescence.
	Lumicyano Fuming	The pieces of duct tape were fumed with Lumicyano in a Superglue Chamber (CApture-BT). The relative humidity in the chamber was 75% and the Lumicyano was heated up to 121 degrees C. It to the Humidity cycle 8 minutes and 34 seconds to get up to humidity. The fume time was 17 minutes and the purge cycle was 5 minutes.
	Gentian Violet	The pieces of duct tape were dipped into Gentian Violet 3 times then rinsed with cold tap water. The tape was then lift to dry.
	Wet Powder Suspension	Wet powder was applied to the pieces of duct tape, the wet powder was on them for 15 seconds then rinsed offed with cold tap water. The tape was then lift to dry.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
D8RRWD	Alternate Light Source	
	Wet Powder Suspension	Wetwop- black
	Cyanoacrylate Fuming	~70 min
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black powder
DHMMQG	Sticky Side Powder	Powder plus photoflow solution mixed. Applied to sticky side of tape. Latent developed on piece D. Appears to be an arch although faint lines only at crease.
DJKN2E	Visual Examination	No visible latent prints were found during the initial visual exam.
	Sticky Side Powder	Outside Side Temp: 92.8 Degrees F. 56.5% RH (Humidity) Room Temp: 70 degrees F. Sticky Side Powder was brushed on the adhesive side of each piece of duct tape. It was allowed to stand for 1-2 minutes, then was rinsed off with water.
	Visual Examination	One (1) latent fingerprint was developed on the adhesive side of tape labeled D.
DKVPND	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	Black
DPM2GP	Visual Examination	
	Alternate Light Source	(445 nm)
	Wet Powder Suspension	Black
DQHM4N	Visual Examination	N/A
	Alternate Light Source	N/A
	BLACK WETWOP	N/A
DWQ4LP	Visual Examination	Visual exam. No friction ridges observed.
	Cyanoacrylate Fuming	Cyanoacrylate fuming in Mason Vactron chamber
	Wet Powder Suspension	Wet Wop used on adhesive side of tape. No friction ridges observed.
	Dye Stain	Rhodamine 6G dye stain used on non-adhesive sides of tape
	Alternate Light Source	Items examined using Polilight ALS & orange filtered glasses. No friction ridges observed.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
E6GQ9E	Visual Examination	No latent print ridge detail could be seen on Item 2 with a visual inspection prior to processing.
	Wet Powder Suspension	Item #2 was processed using wet black powder. Wet black powder was brushed onto the adhesive side of the duct tape and allowed to develope for approximatley 20 seconds. The wet black powder was rinsed off using cold tap water.
EEK47U	Visual Examination	WHITE LIGHT AND LASER 532nm
	Wet Powder Suspension	15 SECOND APPLICATION AND WATER RINSE, WHITE LIGHT
EMV3Z6	Visual Examination	
	Cyanoacrylate Fuming	Non-adhesive side of tape processed. Chamber settings: 60% humidity, fume time 15 minutes, auto-purge time 10 minutes.
	Dye Stain	Non-adhesive side of tape processed. Basic Yellow-40 dye stain utilized. Allowed to dry for approximately 10 minutes.
	Alternate Light Source	Non-adhesive side of tape processed. 455 nm blue light used with 550 nm orange filter.
	Wet Powder Suspension	Adhesive side of tape processed. Black wet powder used, ran under water after application of wet powder and allowed to dry for approximately 30 minutes.
EP3KY2	Visual Examination	I started with a visual examination using UV/ALS/Laser/Flashlight light sources.
	Gentian Violet	I dipped the sticky side of the duct tape in Gentian Violet, rinsed it, and observed a faint purple spot. No ridge detail observed at this point.
	Black Wet Wop	I then painted black Wet Wop onto the adhesive side of the duct tape, rinsed it, and observed a latent impression.
EWNDCL	Visual Examination	Using white light 24/6/2019 at 8 AM
	Cyanoacrylate Fuming	8:30 AM 120 c CNA plate temp and humidity is 80 Rh White Light examination
	Dye Stain	1- Basic yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 Am and examined by using white light. 3- Sudan black at 12:30 PM and examined by white light
	Powder Dusting	1:30 PM and examined by white light
EZNP9L	Visual Examination	Using white light 24/6/2019 at 8 am
	Cyanoacrylate Fuming	8:30 am 120 c CNA plate temp and humidity is 80 Rh White Light examination
	Dye Stain	1- Basic yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 Am and examined by using white light. 3- Sudan black at 12:30 PM and examined by white light
	Powder Dusting	1:30 Pm and examined by white light

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
F9UVF9	Visual Examination	white light including angled
	wet powder/powder suspension	chemical; wet powder black (carbon), manufacturer Kjell Carlsson Innovation. Treatment, paint on powder suspension and rinse with tap water. Control sample positive
FG83XX	Cyanoacrylate Fuming	Visual examination (000-495nm); photography; basic yellow; humidity 83%; temperature 130°c
FP28QY	Visual Examination	Adhesive sides only of all 4 tape squares (A, B, C, and D); ~2mins
	Alternate Light Source	~350nm to ~620nm, adhesive sides only of all 4 tape squares (A, B, C, and D); ~5mins
	Wet Powder Suspension	Black Wetwop used on all 4 tape squares (A, B, C, and D); ~1.5hrs, to include control, transfer of tape piece to and from acetate sheet, application, drying and photograph. Latent developed on adhesive side square D.
FRTMGF	Visual Examination	Flashlight
	Alternate Light Source	ALS 455-515 nm
	Cyanoacrylate Fuming	21 minutes processing time
	Powder Dusting	black powder
	Wet Powder Suspension	
FWHKRJ	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	
G4XLN8	Visual Examination	Nothing Noted
	Wet Powder Suspension	Latent print developed on item D
G73WD2	Cyanoacrylate Fuming	
	Visual Examination	Reflected Ultraviolet Light Imaging
	Dye Stain	Rhodamine 6G
	Alternate Light Source	Laser 532nm. Friction ridges detected during laser examination

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
G8EC82	Cyanoacrylate Fuming	Processed pieces of tape and parchment like paper as received and control in the super glue chamber for thirty minutes.
	Dye Stain	Applied R6G to the non-adhesive side of the pieces of tape and the paper it was affixed to and allowed to dry.
	Alternate Light Source	Visually examined the non-adhesive side of the pieces of tape and paper with the laser, orange goggles and magnifier. Nothing developed.
	Cyanoacrylate Fuming	Processed pieces of tape removed from the paper, the paper and control in the super glue chamber for thirty minutes.
	Dye Stain	Applied R6G to the adhesive side of tape and the paper where the tape had been affixed to it and allowed to dry.
	Alternate Light Source	Visually examined the adhesive side of tape and paper with the laser, orange goggles and magnifier.
	Visual Examination	The piece of tape designated "D" revealed a partial print that was determined to not be of value for identification. Nothing developed on any other item.
	Wet Powder Suspension	Black WetWop was applied to the adhesive side of the pieces of tape. After approximately 15 seconds, the adhesive side of the tape was rinsed with water.
	Visual Examination	Visually examined the adhesive side of the pieces of tape and nothing developed. The ridge detail on "D" was absent.
	Dye Stain	Applied R6G to adhesive side of the pieces of tape and allowed to dry.
	Alternate Light Source	Visually examined the adhesive side of the pieces tape with the laser, orange goggles and magnifier. Nothing developed and the ridge detail on "D" was absent.
GBDAJ9	Visual Examination	First viewed samples under natural and forensic ligths. In this case we could not see fingerprints.
	Wet Powder Suspension	Applied black wet powder suspension on the duck tape. Then washed it with water. Finally we let it dry and observed the results with natural ligth.
GHELE7	Visual Examination	
	Wet Powder Suspension	
GLBBVD	Visual Examination	No visible print.
	Wet Powder Suspension	Black wet powder.
GMRXDD	Visual Examination	Examined tape with oblique lighting for visible prints.
	Alternate Light Source	Examined tape with ALS at wavelengths 415-515nm for visible/fluorescing prints.
	Cyanoacrylate Fuming	Fumed tape in CyanoSafe for twenty minutes with cyanoacrylate.
	Powder Dusting	Dusted non-adhesive side of tape with black powder.
	Wet Powder Suspension	Brushed on wet wop on adhesive side of tape. Rinsed off with water.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
GR7FUU	Visual Examination	Fluoresence lighting examination with magnification.
	Cyanoacrylate Fuming	CyanoSafe for 20 minutes. Rested for 1 hour. Control positive.
	Dye Stain	Gentian Violet dye stain for approx. 30 seconds.
	Wet Powder Suspension	Black Wet Wop applied to adhesive side only for approx. 20 seconds. Ridge detail developed on item 3D and photographed.
	Powder Dusting	Black powder on non-adhesive side.
	Dye Stain	Ray dye stain applied for approx. 30 seconds.
GWWQ38	Visual Examination	Note page photos taken.
	Black Sticky-Side powder	Control made. Application of sticky-side powder, then rinsed.
H6N8WN	Visual Examination	visual examination natural light, illuminator Polilight PL 500 UV,entire range of wavelenght of light and filtres. The trace wasn't recovered.
	Wet Powder Suspension	The wet powder suspension applied with a brush after obout 4 min. rinsed of water. The trace was recovered.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
H9PTLR	Visual Examination	The items were visually examined using a white LED light source under magnification.
	Alternate Light Source	The items were examined for the presence of inherent luminescence using Crime Lite ML (460-510 nm: Orange Filter) under magnification.
	Cyanoacrylate Fuming	The items were processed by placing approximately 5 drops of cyanoacrylate into 3 metal dishes (Total of 15 drops). The metal dishes were placed onto a heating plate. Distilled water was placed in a reservoir inside the chamber to maintain humidity. A test print was created, and placed inside the chamber. Items were placed into the chamber with consideration to space evidence far enough apart to allow CA vapors to circulate between items. The chamber was set to fume for approximately 12 minutes. The test print was checked for visible development of the latent print. Items were left undisturbed for 60 minutes to allow the CA coating to harden. Items were examined using LED lighting under magnification. The adhesive side of the tape was protected during CA fuming.
	Gentian Violet (GV)	The items were processed by immersing in a tray of Gentian Violet solution, agitating for approximately 30 seconds, the items were rinsed off under a gentle flow of cold water. The items were dried in a fume hood. The items were examined using LED lighting, Crime Lite ML2 (420nm-470nm filter): Orange Filter, and Crime Lite ML2 (490nm-560nm filter): Red Filter under magnification.
	Wet Powder Suspension	The items were processed by applying Sticky Side Powder (SSP) to both sides of the items using a soft brush. The SSP remained on the items for approximately 10 seconds and rinsed off under a gentle flow of cold water. The item were dried in a fume hood. Items were examined using LED lighting under magnification.
	Dye Stain	A fluorescent dye stain was used, containing Rhodamine 6G, Ardrox Tracer-Tech P133D, and Basic Yellow 40 (RAY). The items were processed by immersing in a tray of RAY, agitating for approximately 1 minute, items were rinsed off under a gentle flow of cold water. The items were gently patted dry and placed under a fume hood to complete drying. The items were examined using Crime Lite ML (460nm-510nm filter): Orange Filter under magnification.The adhesive side of the tape was protected during dye staining.
	Powder Dusting	The items were processed by picking up a small amount of powder(black)on the ends of the latent print brush bristles, and shaking off excess powder. The powder(black) was brushed gently over the surface of the items using circular strokes. Items were examined using LED lighting under magnification. The adhesive side of the tape was protected during powder dusting.
HAJH4M	Wet Powder Suspension	The adhesive sides of the (4) silver duct tape pieces were processed using black Wetwop lot number 012219B (QC: +known print -non print). Latent prints of possible value were observed on piece "D".

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
HDF948	Alternate Light Source	Crimescope: 415nm - 535nm with yellow, orange, and red filter
	Wet Powder Suspension	Black Wet Powder: Brush application; Allowed to sit for 10-15 seconds on sticky side of tape; Water rinse; Allowed to air dry in fume hood
HDGFHF	Alternate Light Source	Pre-screening, about 5 minutes. Found outline of area of ridge detail on section D, no substantial amount of print visible. Seen with laser and orange laser goggles.
	Wet Powder Suspension	Used black Wet Wop applied with a small paint brush. Applied a thin layer to each square, then a second layer to each in the same order. Let sit for another minute, then used a gentle stream of cool water to rinse the Wet Wop off. Let the duct tape sit on a paper towel, sticky side up, overnight to completely dry before photographing.
HTUQ8M	Visual Examination	diffrent light sources and filters
	Wet Powder Suspension	Wet Powder Black - adhesive side, visual examination in white light
HUK84G	Visual Examination	Bright light. No ridge structure present. No collection method used
	Alternate Light Source	LabKam. No ridge structure present. No collection method used
	Wet Powder Suspension	Black Sticky Side Powder "Wet Powder - Black" by Evident - brush on, rinse with water, and let dry. Ridge structure of collection value present on adhesive side of duct tape labeled "D". Digital photography of ridge structure found on the adhesive side of duct tape labeled "D"
HUPUWA	Visual Examination	No visible fingerprints, trace evidence, or blood observed.
	Wet Powder Suspension	Black Wetwop
HVD6BN	Alternate Light Source	Visual examination and 505nm and UV wavelengths. Small amount of ridge detail observed with UV.
	Wet Powder Suspension	Tape removed from paper with Un-du. Wet Powder placed on tape for short period of time and then rinsed off with water. Outline of finger and small amount of ridge detail observed.
HVKFJ9	Wet Powder Suspension	Made standard and treated with wet black powder. Allowed powder to sit for 15 seconds then rinsed off with cold water. Wet black powder then applied to 4 pieces of tape. Allowed to sit for 15 seconds then rinsed off with cold water. Ridge detail on Item D noted.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
J2NY3J	Visual Examination	06.10.19 visual exam under white light; no prints observed
	Cyanoacrylate Fuming	06.10.19 CA fuming in the CYVAC, control print developed; no prints observed. Pieces of tape left adhered to parchment paper to protect the adhesive side from CA processing
	Gentian Violet	6.14.19 Gentian Violet batch 69, print observed on D. Used brush on one of the pieces of tape, the brush hairs stuck to some of the tape
	Wet Powder Suspension	06.14.19 adhesive sides, print observed on D
	Dye Stain	06.24.19 batch 699, RAY
	Alternate Light Source	06.24.19 Rofin Polilight flare 2, 450 nm, orange filter, no prints observed
J6Z9BB	Wet Powder Suspension	10g Hansanol (Detergent), 90g distilled water, 7g Black Powder mixed together. brush tape with suspension, rinse with clear water
JB8U3E	Visual Examination	Photograph as packaged. Then during visual examination (-)results.
	Wet Powder Suspension	Photo-Flo 200 solution w/black powder and H2O. Then during visual examination (+)results. To enhance the fingerprint I completed this task three times. Ridge detail was present, however so light that pattern determination was unable to be made.
	Alternate Light Source	The fingerprint was visible; however the pattern was unable to be made.
JCF28R	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	black
JDWECA	Visual Examination	TracER Laser
	Wet Powder Suspension	Black Wet Wop
JDXV92	Gentian Violet	duct tape was dipped into gentian violet solution several times after observing a fingerprint impression
JEM82F	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	Black Wet Wop
JHRBU9	Visual Examination	
	Wet Powder Suspension	Wet powder was rinsed with water.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
JLPWH6	Visual Examination	Four (4) pieces of duct tape, each measuring 1 7/8" X approximately 2"- 2 1/4", were examined. Each piece of duct tape is labeled with a letter in black marker ("A," "B," "C," and "D.") Each piece of tape is placed, adhesive side down, on a white sheet of parchment paper. As indicated on processing request, only adhesive side in intended for processing, so cyanoacrylate will not be used. No FRD observed on adhesive-side of tape using white/ambient light.
	Alternate Light Source	No FRD observed on adhesive-side of tape with Crimescope between 350-495 nm wavelength with orange and yellow filters.
	Wet Powder Suspension	All four (4) pieces of duct tape were brushed with Wet Powder - Black, on adhesive side, set for approximately 15 seconds and rinsed with cool water.
	Visual Examination	No FRD observed on adhesive-side of tape marked "A," "B," or "C" using white/ambient light. FRD observed on adhesive-side of tape marked "D" using white/ambient light.
JU2PF2	Visual Examination	Examined sectors for any visible prints.
	Wet Powder Suspension	Applied wet powder black, and rinsed under tap water.
K4HWRV	Wet Powder Suspension	Black Wetwop painted onto adhesive side of tape and rinsed with distilled water. Lot#112216-01
K4KJ7N	Visual Examination	Looked at the tape and could not see any latent prints
	Wet Wop (black)	I applied Wet Wop (black) to the adhesive side of the duct tape and then rinsed the Wet Wop off with cool water. Once I did that, a latent print appeared.
K6DFTV	Visual Examination	Before enhancement : Incident and field lightning with visible light (crimelite 2 and crimescope), raking light (crimelite 2), UV (crimelite 2 365nm)
	Sticky Side Powder	Sticky side powder (0,75g - 2ml H2O - 2ml photoflo), visual examination with visible light (crimelite 8x4)
KE6P6D	Wet Powder Suspension	Application with brush and rinse with water
KEKYA8	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	Black Wet Powder
KQKHZE	Visual Examination	no ridge structure, not collected, examined with a magnifier and bright light source
	Alternate Light Source	adhesive side examined using LabKam, no ridge structure, not collected
	Wet Powder Suspension	black sticky side powder applied to adhesive side with camel hair brush then rinsed with water, ridge structure no value, not collected

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
KXCZ7B	Sticky-Side Powder	A visual exam of the items yielded no results. The stick side of the 4 pieces of duct tape were processed using sticky side powder and allowed to sit for 15 seconds. The items were rinsed with water and allowed to air dry. A single latent print was observed on the piece of duct tape labelled D.
KZK7RC	Visual Examination	AT 9:00 AM WHILE USING PROTECTIVE GLOVES, THE SUBMITTED 4 PIECES OF SILVER DUCT TAPE (LABELED A,B,C & D) WERE VISUALLY EXAMINED CAREFULLY UNDER MAGNIFIED LIGHTING TO DETECT ANY LATENT FINGERPRINTS AND PHOTOGRAPHED ON BOTH SIDES BEFORE PROCESSING IT.
	Cyanoacrylate Fuming	AT 9:20 AM THE DUCT TAPE ALONG WITH A CONTROL SAMPLE WAS PROCESSED NEXT USING CYANOACRYLATE FUMING (LOT#201903151, EXP DATE:04-2020) FOR 15 MINUTES IN ATTEMPT RECOVER AND TO ENHANCE ANY LATENT FINGERPRINTS.
	Visual Examination	AT 9:35 AM THE DUCT TAPE WAS VISUALLY EXAMINED CAREFULLY AGAIN FOR DEVELOPMENT OF ANY NEW FINGERPRINTS UNDER MAGNIFIED LIGHTING.
	Wet Powder Suspension	AT 9:40 AM THE DUCT TAPE WAS NEXT PROCESSED USING A STICKY SIDE ADHESIVE POWDER (LOT#"201706324, EXP DATE: 12-2027) TO RECOVER, ENHANCE AND TO SUBMIT ANY LATENT FINGERPRINTS.
	Visual Examination	AT 9:50 AM THE DUCT TAPE WAS VISUALLY EXAMINED CAREFULLY AGAIN UNDER MAGNIFIED LIGHTING TO DETECT ANY NEW DEVELOPMENT OF LATENT FINGERPRINTS.THE RESULTS WERE "POSITIVE" FOR A PRINT ON D. THE LATENT FINGERPRINT EXAMINATION WAS FINISHED AT 10:00 AM.
L2UKQ6	Visual Examination	Item visually examined.
	Cyanoacrylate Fuming	Item placed in a CA chamber; CA added & heated to appropriate temp, fuming item with CA vapor.
	Powder Dusting	Non-adhesive side of item processed with magnetic black powder. No results on non-adhesive side after CA & magnetic processing.
	Wet Powder Suspension	Adhesive side of item processed with Wet Wop. Item rinsed under water. Slight development of finger shaped impression on adhesive side after Wet Wop processing.
L83VQC	Visual Examination	
	Alternate Light Source	Inherent Luminescence Exam.
	Cyanoacrylate Fuming	Vacuum. Non-adhesive side.
	Powder Dusting	Non-adhesive side.
	Dye Stain	Gentian Violet. Adhesive side. Possible impression on D but too faint to be certain.
	Wet Powder Suspension	Adhesive side. Latent print developed on tape D.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
LFFDFH	Visual Examination	ambient and green light (Tracer laser) used
	Lumicyano	fumed in CApture-BT chamber for 17 minutes
	Wet Powder Suspension	black wet powder brushed on adhesive side, allowed to sit for approximately 15 seconds and then rinsed with tap water
	Gentian Violet	run through solution three times and rinsed with tap water
LG8TQ9	Cyanoacrylate Fuming	Silver side, non adhesive processed with cyanoacrylate, no LP developed. Adhesive side was protected.
	Wet Powder Suspension	Adhesive side processed with wet powder, single LP developed on item 2D
LJAX29	Visual Examination	Utilized white light. Approximately 5 minutes.
	Gentian Violet	Reagent made in lab. Utilized dipping method. Agitated in a tray for 1 minute and rinsed for 30 seconds. Repeated until optimum development occurred. Hung to dry. Ridges were observed on tape D. Utilized the ALS (520nm with red goggles).
	Wet Powder Suspension	Wetwop made in lab. Utilized painting method. Left on for 15 seconds then rinsed off. Repeated until optimum development occurred. Hung to dry. Ridges were observed on tape D.
LM96M7	Wet Powder Suspension	Batch #1-0271, paint with camel hair, brush leave 20 sec, rinse with cool water
LMFVTA	Visual Examination	Oblique light.
	Alternate Light Source	Used Crimescope with wavelengths 455-515nm.
	Wet Powder Suspension	Used Wet-Wop brushed onto adhesive side of tapes.
LPGG68	Alternate Light Source	forensic light source wavelenght 420-470nm and orange filter we found mark - piece D
	Cyanoacrylate Fuming	mark on piece D
	basic Yellow 40	mark on piece D
LPZ43P	Visual Examination	PoliLight PL500
	Wet Powder Suspension	brush applied for 1 minute then washed out and dried.
LWLH2A	Visual Examination	Use of white light and magnifier
	Wet Powder Suspension	Apply Wetwop to surface with brush and rinse with water after 20 to 30 seconds
LZKZY2	Dye Stain	Gentian violet
	Visual Examination	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
M27L7C	Undu remover	Used Undu remover to remove duct tapes from thin paper that they were attached.
	Visual Examination	With visual day light and clear led light (Crime-lite white light 400-700nm). No findings.
	Wet Powder Suspension	Black WetPowder. Finding in sample D.
M3LFP4	Wet Powder Suspension	
M6B4CK	Compressed Air	Removed adhesive side of tape from affixed paper using compressed air.
	Visual Examination	Viewed adhesive sides of tape with ambient and oblique lighting. No ridge detail observed.
	Alternate Light Source	Viewed adhesive sides of tape with alternate light source with UV and 505nm wavelengths and clear and orange goggles. Faint area of ridge detail observed on tape "D".
	Wet Powder Suspension	Wet Powder applied to adhesive sides of tape for a short period of time and rinsed with tap water. Ridge detail observed on adhesive side of tape "D" and labeled MLP3. Photos taken.
M7KUB9	Visual Examination	Examined for any patent prints and found none.
	Wet Wop	I used a quality control on a piece of duct tape and confirmed the black Wet Wop was working, it was. I brushed Wet Wop on the adhesive side of each evidence item, duct tape (A-D). I located a print of duct tape "D".
MCQ3K6	Forensic ligths	The evidence is checked using "LUMATEC400" forensic ligth with all spectrum. 25° C room temperature.
	Cyanoacrylate Fuming	Vaporization of cyanoacrylate in fumming chamber for about 13 minutes. 130° C temperatura. 71% humidity.
	Forensic light	The evidence is checked again using "LUMATEC400" forensic ligth with all spectrum. 25° C room temperature.
	Wet Powder Suspension	The adhesive part of the evidence is painted by Adhesive Side Developer of Sirchie.
	Forensic light	The evidence is checked again using "LUMATEC400" forensic ligth with all spectrum. 25° C room temperature.
MEWXG8	Visual Examination	Pre processing photos - visual examination - RUVIS - ALS
	Wet Powder Suspension	Wetwop
	Visual Examination	photos of friction ridges - post processing photos. Time of development of friction ridges 9:56 AM. Friction ridge impression was located on Item #2 labeled D. Impression labeled 2DL1.
MLD2BA	Wet Powder Suspension	Brushed on, rinsed with water

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
MPCEWE	Visual Examination	Using white light 24/6/2019 at 8 AM
	Cyanoacrylate Fuming	8:30 AM 120 c CNA plate temp and humidity I'd 80 Rh White Light examination
	Dye Stain	1- Basic yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 Am and examined by using white light. 3- Sudan black at 12:30 PM and examined by white light
	Powder Dusting	1:30 Pm and examined by white light
MQPE79	Visual Examination	Visual examination of Items 2A-2D was performed prior to any chemical processing and after each chemical process applied to each Item 2A-2D
	Wet Powder Suspension	black WetWop (WW) powder suspension applied to the sticky side of duct tape Items 2A-2D with a brush and allowed to set for 30-60 seconds prior to rinsing with distilled water
MR6RU6	Visual Examination	White light and ALS
	Wet Powder Suspension	
MV3DKM	Visual Examination	under white light and magnification, examined under fluorescent light
	Cyanoacrylate Fuming	CyanoSafe recirculation chamber for 20 minutes, wait 1 hour, examined under fluorescent light
	Gentian Violet	batch 69, dip for 30 seconds, examined under fluorescent light
	Wet Powder Suspension	both adhesive and non-adhesive sides processed, brushed on for 10 seconds, examined under fluorescent light
	Dye Stain	RAY, batch 698, dip for 30 seconds examined with Crime Lite ML2 (420nm- 470nm filter)- orange filter
MYHA87	Wet Powder Suspension	Visual inspection. Black Wetpowder. testing tape OK
MYJWUC	Wet Powder Suspension	
MZVX8X	Visual Examination	Item 2 was examined using oblique lighting. There were no visible prints observed.
	Dye Stain	The four pieces of silver duct tape were each immersed in a tray of Gentian Violet solution for approximately 30 seconds, then rinsed using distilled water and laid to air dry.
N3YNGY	Visual Examination	
	Alternate Light Source	UV & CS @ 515nm
	Cyanoacrylate Fuming	non-adhesive side
	Wet Powder Suspension	Black wet powder (adhesive side)
	Dye Stain	RAM (non-adhesive side) viewed with CSS
	Powder Dusting	Black Magnetic Powder (non-adhesive side)

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
NAZ2EG	Wet Powder Suspension	WETPOWDER was "painted" onto each piece, allowed to set for approximately 15 seconds, then rinsed with running cold water. Control performed (+).
NCMM6H	Visual Examination	Used overhead lighting and a flashlight to do a visual examination of the adhesive side of the tape.
	Wet Powder Suspension	Sticky side powder was brushed onto the adhesive portion of the tape. I let it sit on the adhesive side for 30 seconds and then rinsed it off with water.
NFLX2H	Wet Powder Suspension	Sticky Side Powder brushed onto surface. Let sit and then rinse after 30 seconds.
NJJMF6	Visual Examination	With different kinds of light sources. White, sidelong, UV and blue. Neg.
	Cyanoacrylate Fuming	On the not adhesive side (adhesive side was protected with plastic). Processing time 10 min, 2 g CNA, Rh 80%. Neg.
	Wet Powder Suspension	WP Black on the adhesive side. Pos.
	Dye Stain	BY40 on the not adhesive side. Neg
NKDBWE	Wet Powder Suspension	Blac Bath WP 180401 ex.date Apr 2020. Processing time: with vater about 30 seconds
NZ9P3Z	Visual Examination	Using a flashlight
	Wet Powder Suspension	Sticky-side powder mixed with Photo-Flo 200 solution and water. Brushed on and rinsed off after about 10 seconds.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
P2NU8W	Visual Examination	Item was visually examined using magnification and white light. No prints were observed.
	Cyanoacrylate Fuming	4-5 drops of cyanoacrylate (CA) were placed into each of 3 CYVAC cups (12-15 drops total) and then placed on the heating element. A test print was added to the chamber. All items were placed in a way that will allow for circulation of the CA vapors and exposing the entire surface to them. The cycle ran for 12 minutes and then a 10 minute purge cycle. Items were allowed to sit undistrupted for 60 minutes. Items were visually examined under magnification and white light. No prints were observed.
	Gentian Violet	Items were gently painted on the adhesive side with gentian violet solution. Allowed to sit for approximately 30 seconds and then rinsed to remove the excess under cold water. Items were then allowed to air dry completely. Items were visually examined under magnification and white light. No prints were observed.
	Wet Powder Suspension	Black Wetwop is applied to the adhesive surface by painting it over the item. It was left on approximately 10-20 seconds and the excess was rinsed off with tap water. The item was allowed to air dry completely. Item was then visually examined under magnification and white light. One (1) print was observed on item 2D. Print was photographed for preservation.
	Dye Stain	Items were immersed in a tray of RAY solution for additional processing of the non-adhesive side and gently agitated for approximately 1 minute. Items were rinsed to remove excess RAY solution under tap water. Items were gently patted dry. Items were visually examined using a Crime Lite ML (460nm-510nm): orange filter). No prints were observed.
	Powder Dusting	Black powder was chosen to allow for contrast for additional processing of the non-adhesive side. The brush was dipped into the black powder in order to get a small amount of powder on the ends of the brush. Excess powder was shaken off the brush. The brush is lightly run over the item in a circular motion. Item was visually examined under magnification and white light. No prints were observed.
P63M4G	Visual Examination	The samples were viewed under white light with magnification with no prints observed.
	Gentian Violet	The samples were submerged in a tray with Gentian Violet (batch# 69), agitated for approximately 45 seconds, rinsed, and allowed to dry. The samples were then viewed under magnification with green light with a red filter, blue light with an orange filter, white light, and white light with an orange filter. All visualization methods presented a faint outline of a print on sample "D", however, the white light and the white light with an orange filter presented the best visualization of faint ridge detail.
	Wet Powder Suspension	The samples were brushed with Black Wet Wop, allowed to sit for 30 seconds, rinsed, and allowed to dry. The samples were viewed under magnification with white light, where ridge detail could be observed on sample "D".

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
P7BAMB	Visual Examination	White light -> Poly-light -> Reflected UV
	Cyanoacrylate Fuming	
	Cyanoacrylate Fuming	After removing the tapes
	Wet Powder Suspension	Black Wetwop
	Dye Stain	BY40 -> C.V
PECPPH	Visual Examination	Visual examination under white light and magnification on July 6, 2019. No prints were observed.
	Gentian Violet	Gentian Violet (batch #69) applied on July 6, 2019 to the adhesive side. Gentian Violet was applied using a brush and then the pieces were rinsed under water and laid flat to dry in a fume hood. No prints were observed.
	Wet Powder Suspension	Black Wetwop applied to adhesive side on July 6, 2019. Pieces were rinsed under water and then laid flat to dry in a fume hood. Print observed.
PKA6WW	Visual Examination	
	Wet Powder Suspension	At the sticky side.
PKEHH8	Visual Examination	No friction ridges present upon visual examination.
	Wet Powder Suspension	Sticky-Side Powder solution mixed and applied by brush to adhesive side of all samples submitted. Excess sticky side powder rinsed off of adhesive surface with water.
	Visual Examination	Friction ridge impression, a short-count left slant loop, visible on sample D. No friction ridge impressions visible on samples A, B and C.
PLNBA7	Visual Examination	Looked at item to see if there were any patent prints visible.
	Cyanoacrylate Fuming	Placed item in CAE chamber approximately 20 minutes to fume, added hot water for humidity
	Powder Dusting	Powdered non-adhesive side of item using black powder.
	Wet Powder Suspension	Process the adhesive side of the tape using black Wetwop.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
PM8UHJ	Visual Examination	Visual Examination completed on 6/11/19. Visual Examination under white light and magnification. No prints observed. Number of items confirmed.
	Cyanoacrylate Fuming	Processing completed on 6/11/19. Non-adhesive side processed in the Cyanosafe Recirculation Chamber for 12 minutes and let sit for 60 minutes. Control print was positive. Examined under white light and magnification. No prints observed. Number of items confirmed.
	Gentian Violet	Processing completed on 6/13/19 for adhesive side of tape. Each piece of tape was immersed in the Gentian Violet solution (Batch# 069), agitated for 30 seconds, rinsed with cold water and allowed to dry. Examined under white light and magnification. No prints observed. Number of items confirmed.
	Wet Powder Suspension	Processing completed with black Wet Wop on 6/13/19. Wet wop was poured into a tray and brushed onto the adhesive side of each piece of tape with a camel hair brush, allowed to sit for approximately 15 seconds, and then excess Wet Wop was rinsed off with cold water. Each piece of tape was allowed to air dry. Examined under white light and magnification. Print observed on piece "D". Number of items confirmed.
	Powder Dusting	Processing completed on 6/13/19. Black magnetic powder was applied to the non-adhesive side of each piece of tape. Examined under white light and magnification. No prints observed. Number of items confirmed.
	Dye Stain	Processing completed on 6/13/19. Non-adhesive side of tape was treated with RAY (Batch# 696) and examined with the Crime Lite ML (460nm- 510nm light) with an orange filter. No prints observed. Number of items confirmed.
PNB7YE	Wet Powder Suspension	Item 2: wet powder: add wet powder, wait 10 seconds and remove wet powder with water.
PNFB93	Cyanoacrylate Fuming	The four pieces of silver duct tape was processed with Cyanoacrylate Fuming. There was a positive control taken with the items of evidence with accurate results.
	Powder Dusting	The non-adhesive side of the tape was processed/applied with black fingerprint powder with no prints of value on tapes (A-D)
	Wet Powder Suspension	The adhesive side of the tape was processed/applied with black Wetwop. The Wetwop was applied to the tape for about 15 seconds and then rinsed off with cool water. The tape was allowed to dry. No ridge detail was found on any of the tape. The Wetwop was reapplied to the tape with the same methodology. No ridge detail was found on any of the tape with the reapplication. There was a positive control taken before the items of evidence was processed with accurate results.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
PP7RR7	Visual Examination	Examend with white light, no print was visible. Examend with LED-flashlight, blue light (450 nm)/ yellow goggles and green light (505 nm)/ orange goggles. A print was visible with blue light and yellow goggles, but it was just a mark without any friction ridges.
	Wet Powder Suspension	The pieces of tape were painted with black Wet Powder with a brush, and after a few seconds rinsed in cold running water and dryed in room temperature. A weak print was visible with only a few friction ridges.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
PQD9KA	Visual Examination	White light examination of exhibit as received using ambient laboratory lighting and 'Tiablo' High Power LED Flashlight at varying angles.
	Alternate Light Source	Sequential initial High Intensity Light Source (HILS) examination carried out, following dark adaptation, using Green Crime Lite 490nm-560nm with 571nm viewing filter followed by Blue Crime Lite 420nm-470nm with 476nm viewing filter and UV Crime Lite 350nm- 380nm with 408nm viewing filter. Magnifying eyeglass used where required. QA adhered to and control test piece passed.
	Cyanoacrylate Fuming	Carried out as per CAST validated/internally verified procedure (Foster & Freeman MVC5000 Cabinet, Relative Humidity 80%, Glue time 13 minutes & 4g of superglue used). Following treatment, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass used where required. QA adhered to and control test piece passed.
	Dye Stain	Ethanol-Based BY40 dye used, carried out as per CAST validated/ internally verified procedure. BY40 dye applied to non-adhesive tape with brush and left for ~15 seconds. Rinsed with water and left to dry. The tape remained stuck to backing throughout the treatment.Examined when dry using blue Crime Lite 420-470nm with 476nm viewing filter, following dark adaptation, and magnifying eyeglass used where required. QA adhered to and control test piece passed.
	Wet Powder Suspension	Carbon-based powder suspension used, carried out as per CAST validated/internally verified procedure. Both non-adhesive and adhesive sides treated. Pre-rinsed non-adhesive side with water. Powder Suspension applied to tape with soft squirrel hair brush and left for ~10-20 seconds. Powder Suspension rinsed off using gently running water until maximum contrast obtained and then allowed to dry. When dry, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass used where required. QA adhered to and control test piece passed. Outline of fingerprint mark identified however no ridge detail present. Mark photographed. Titanium Dioxide (white) powder Suspension used, carried out as per CAST validated/internally verified procedure. Both non-adhesive and adhesive sides treated. Pre-rinsed non-adhesive side with water. Powder Suspension applied to tape with soft squirrel hair brush and left for ~10-20 seconds. Powder Suspension rinsed off using gently running water until maximum contrast obtained and then allowed to dry. When dry, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass used where required. QA adhered to and control test piece passed.
PQJJGF	Visual Examination	Initial visual exam 03.06.2019 using white light and fluorescent light sources - result negative.
	Wet Powder Suspension	06.06.2019 Wet Powder Suspension (Black Carbon) process
	Visual Examination	06.06.2019 examination using Daylight / White light following wet powder suspension process revealed an impression on Tape D.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
PQZF7U	Visual Examination	Initial visual examination with white light and light source, blue and green light. No visible fingerprint.
	Cyanoacrylate Fuming	CNA on the not adhesive side. No visible fingerprint, teststrip positive. 2 g glue, humidity 80%, heat 120% processing time 5 minutes.
	Sticky Side Powder	Sticky side powder (SSP) stired in kodac photo flo-200. Teststrip positive. The SSP solution on the adhesive side of the tape for 15 seconds and then rinsed with water. A fingerprint was clearly visible in section D.
Q6YUTA	Visual Examination	white Light
	Alternate Light Source	poly light 450NM
	reflected UV	
	Wet Powder Suspension	positive on part D
QAPDMD	Visual Examination	Oblique light.
	Dye Stain	Gentian Violet.
	Dye Stain	Sticky Side Powder.
QDRDHW	Wet Powder Suspension	Painted each piece of tape with black wet powder and applied a small amount of water to rinse the tape off.
QVWCG8	Visual Examination	
	Wet Wop	
QXXM6U	Visual Examination	Item was viewed under a magnifying glass with light.
	Cyanoacrylate Fuming	(Non-adhesive side of the tape) Chamber set at 60% humidity max fume time 15 min, auto purge time 10 min.
	Dye Stain	(Non-adhesive side of the tape) Basic Yellow dye stain, allowed to dry for approximately 5 min.
	Alternate Light Source	(Non-adhesive side of the tape) Viewed with blue light and orange filtered goggles.
	Wet Powder Suspension	(Adhesive side of the tape) Brushed on then rinsed off with water.
QYMXX9	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
R37679	Visual Examination	LIGHT SOURCE EXAMINATION NO USEFUL MARKS
	Cyanoacrylate Fuming	ITEMS TREATED DIRECT TO BY40 AFETR 24 HOURS AS PER FEL TECHNICAL PROCEDURE
	Dye Stain	ETHANOL BASED BY40 STAIN . ALLOWED TO DRY IN DRYING ROOM.MARK C LAVBELLED ON ADHESIVE AND PINNED ONTO FOAM AND SECURED IN BOX FOR PHOTOGRAPHY
	Wet Powder Suspension	WPS BLACK CARBON BASE SUITABLE FOR ADHESIVE SIDE AND CONTRAST.
RA88YR	Visual Examination	Visual examination under white light and magnification on June 28, 2019. No prints were observed.
	Cyanoacrylate Fuming	CyanoSafe (Crime Scene Unit) recirculation chamber (non-adhesive side) on June 28, 2019. Test print positive. No prints were observed.
	Gentian Violet	Gentian Violet (batch #069) (adhesive side) processing on July 3, 2019. No prints were observed.
	Wet Powder Suspension	Wet Powder Suspension (adhesive side) processing on July 3, 2019. Prints were observed on piece D.
	Powder Dusting	Black powder (non-adhesive side) on July 3, 2019. No prints were observed.
	Dye Stain	RAY (batch #700) processing and examination using Foster + Freeman Crime Lite ML with a 460nm-510nm bandwidth filter and orange barrier on July 3, 2019. No prints were observed.
RGALXV	Visual Examination	Examined visually for latent prints.
	Wet Powder Suspension	Used Wet Wop black, positive result on Item D, negative development results on Items A, B, and C.
	Visual Examination	Visual examination of Items A, B, C, and D. Developed latent print was observed on Item D only.
RRPPUT	Wet Powder Suspension	Used EZFLO solution with Adhesive-Side Powder Dark on the adhesive side. After cleaned with wàter, appears a ridge detail.
T9PV3M	Visual Examination	I visualized the adhesive side of the piece of grey tapes as they were, and I also used oblique lighting, ALS, UV, and LASER. It took about 5 min.
	Gentian Violet	I completely immersed the adhesive side of the grey tapes for approximately 30 seconds while agitating in the gential violet and then rinsed off the excess stains with tap water.
	Black wetwop	I brushed the Wetwop onto the adheside side of the grey tapes and covered the entire area. I let the wetwop sit for about 30 seconds and then I rinsed them with tap water.
TAJHFQ	Visual Examination	White ambient light. No print was detected.
	Wet Powder Suspension	Carbon based Wet Powder suspension. A good quality print was detected in section D.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
TCRN4D	Cyanoacrylate Fuming	Vacuum Chamber VAC 200, 4 hours (following the time of development ot test fingerprints)
	Wet Powder Suspension	applied with brush, after one minute rinsed with tap water
THG7F4	Cyanoacrylate Fuming	Item exposed to CA fumes for approx. 25 minutes in atmospheric tank set at 37 degrees C. Item allowed to set approx. 30 minutes. Viewed.
	Wet Powder Suspension	Adhesive side processed with Black Powder Slurry (equal parts water, dish soap, black powder) using camel hair brush. Slurry washed off approx. 15 seconds after application, item dried and viewed.
TKKWN4	Wet Powder Suspension	Wetwop
TXU83Y	Wet Powder Suspension	Chemical brushed on adhesive side with camel hair brush; left on surface for 10 seconds; chemical rinsed off with clean water
U4W72A	Wet Powder Suspension	Wet-Wop Black used. Painted on sticky side of the tape and rinsed off after 10-15 seconds.
U6JUBP	Visual Examination	White light. No prints visible.
	Alternate Light Source	Blue and green fluorescent light. No prints visible.
	Cyanoacrylate Fuming	(For the upper side of the tape, since we normally examine that side too. No prints visible after CNA.)
	Powder Dusting	(For the upper side of the tape, since we normally examine that side too. No prints visible after CNA + powder dusting.)
	Wet Powder Suspension	The tape was removed from the paper and Wet Powder Black was used. A fingerprint was developed on the sticky side of tape "D".
UDG6GY	Visual Examination	
	Wet Powder Suspension	Black Wetwop was applied to the adhesive sides of the evidence with a brush and allowed to process for 20-30 seconds; then, the Wetwop was rinsed with tap water from the evidence and the evidence allowed to dry
UEBAY8	Wet Powder Suspension	Black wet powder
UKDH6Z	Visual Examination	No visible print
	Cyanoacrylate Fuming	Cabinet: LabRum Klimat, time: 20 minutes, temperature: 125 celsius, humidity: 80%
	Powder Dusting	Magnetic jet black
	Wet Powder Suspension	Mixture of black and white
UM2QU4	Wet Powder Suspension	MIXED SOLUTION AND APPLIED, LET SIT ABOUT 20 SECONDS, RINSED, LATENT WAS VISIBLE ON LETTER "D"

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
UNWD9R	Visual Examination	
	Cyanoacrylate Fuming	Heat on glueplate: 120 degrees celcius, Humidity in cabinet: 80% rh, Process time: 10 min
	Dye Stain	Basic Yellow 40 at the non sticky side.
	Alternate Light Source	420-470 nm
	Wet Powder Suspension	At the sticky side.
UR3PC9	Visual Examination	Visual exam with magnification; Non sticky side of tape
	Cyanoacrylate Fuming	Non sticky side of tape
	Dye Stain	Non sticky side of tape; MBD dye stain used
	Visual Examination	Tape removed from paper; sticky side examined; Visual exam with magnification
	Wet Powder Suspension	Sticky side of tape used black wetwop
URHD89	Visual Examination	
	Alternate Light Source	(495 nm)
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	Ardrox (350 nm)
UU4FCE	Visual Examination	White light and magnification.
	Gentian Violet	Batch 069. Agitated for 30 seconds in solution, rinsed, and allowed to dry. Repeated.
	Wet Powder Suspension	Black wet-wop. Allowed to sit on item for 15 seconds, rinsed, and allowed to dry.
UUL4F9	Visual Examination	Examination with Superlite Lumatec (UV and visible spectrum), Coherent laser 532 and 577 nm.
	Wet Powder Suspension	Application of black wet powder with a brush then rinced with water. Examination with with light.
UULCV2	Wet Powder Suspension	Wetwop, black
UWC6LW	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	Application of black wetwop and rinsed off with cool water after ~ 20sec.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
UXLWTT	Visual Examination	I analyzed and processed both sides of tape.
	Alternate Light Source	
	Cyanoacrylate Fuming	(Non-adhesive side)20 minute fuming cycle and 5 minute purge
	Dye Stain	R.A.M. (Non-Adhesive side)
	Wet Powder Suspension	Black Wetpowder solution was used on adhesive side. Applied with brush and rinsed with water after 10 seconds.
VDCLY9	Visual Examination	With no chemical enhancement (only eyes) and with white light (flashlight) at direct and oblique angle all 4 pieces were examined. Ridge structure: No collection value
	Alternate Light Source	With no chemical enhancement (Using Crime lite 82S Blue/Green and UV Light) all 4 pieces were examined again. Ridge structure: No collection value
	Adhesive Side Developer - Supplier (ASD7D from SIRCHIE	Control tested positive prior to processing. Working solution is applied on the duct tape pieces using brushing technique. They were washed under tap water to remove access Adhesive Side Developer. This process was repeated twice. They was allowed to dry at room temperature
	Visual Examination	After chemical enhancement (Adhesive Side Developer), they were examined and Ridge structure (Smudged) was observed in section D but not good for comparison even after photographing it by DCS-5 system.
VDYRLU	Alternate Light Source	LASER - Inherent luminescence, ridge detail visualized on piece D
	Cyanoacrylate Fuming	Cyanoacrylate Chamber Program #2 (Grams 2.5, Humidity 60%, RH Dwell 1 minute, CA Heat 250F, Fume 18 minutes, Purge 4 minutes), test print +
	Dye Stain	Rhodamine 6G applied, rinse with methanol, view with LASER, ridge detail visualized on piece D
VMZGW4	Gentian violet	The four pieces of silver duct tape (A, B, C and D) are then consecutively immersed in gentian violet. The reagent is removed with water and allowed to dry.
VUJD87	[No Methods Reported.]	0930 Adhesive side treated w/Wetwop and rinsed. 1 print developed on piece D. Test +
VUZBCV	Visual Examination	TracER Laser with orange filter
	Wet Powder Suspension	WET WOP (black)
	Cyanoacrylate Fuming	FF MVC5000
	Dye Stain	Rhodamine 6G, TracER Laser with orange filter
	Powder Dusting	black
VVVXNY	Visual Examination	
	Sticky Side Powder (black)	Applied for 30 seconds.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
VWP9JV	Visual Examination	White light and fluorescence examination 350nm-650nm with appropriate edge filters
	Wet Powder Suspension	applied with the brush, waited 30 sec. - rinsed with cold running tap water
VZLRPZ	Sticky Side Processing	applied sticky side process solution to the sticky side of all four pieces of tape and rinsed off with clean water. Latent print developed on section D.
W86QW7	Visual Examination	Ambient, UV, Tracer
	Gentian Violet	
	Wet Powder Suspension	Black wet wop
WCELJA	Visual Examination	
	Powder Dusting	Magnetic
	Wet Wop	
WEMJB6	Visual Examination	Using White Light 24/6/2019 at 8 AM
	Cyanoacrylate Fuming	8:30 AM 120 C CNA Plate Temperature and Humidity is 80 Rh White Light examination
	Dye Stain	1- Basic Yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 AM and examined by using White light. 3- Sudan Black at 12:30 PM and examined by white light
	Powder Dusting	1:30 PM and examined by White Light
WLQ7Y6	Visual Examination	6-6-19 Visual examination under white light and magnification. No prints.
	Cyanoacrylate Fuming	6-11-19 Processing in the CyanoSafe with adhesive side protected. Test strip positive. Examined with white light and magnification. No prints.
	Dye Stain	6-14-19 Gentian Violet stain on sticky side, batch 69. Air dried. Print developed on piece labeled D.
	Wet Powder Suspension	6-14-19 Processed item with black wet wop. Air dried. Print developed on piece labeled D.
	Dye Stain	6-24-19 Processed item with RAY dye stain, batch 699. Examined with Rofin Polilight flare plus 2 450 nm and orange lens. No prints.
WR7DF4	Visual Examination	
	Alternate Light Source	White (400-700 nm) and blue (430-470 nm) light.
	Wet Powder Suspension	Dye stain black suspension. 30 seconds processing time.
WUZKXZ	Wet Powder Suspension	Sticky Side Powder. Second application was used on piece "D" only to enhance contrast of ridge detail

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
WVALJY	Wet Powder Suspension	Black Wet Wop
WY9KWR	Visual Examination	visual inspection
	Cyanoacrylate Fuming	super glue (3 min)
	Dye Stain	RAM- fluorescent dye
	Alternate Light Source	Foster Freeman DCS-5; No prints developed
	Wet Powder Suspension	6/26/2019 Processed adhesive side with Wetwop; print developed on adhesive side
WZL8CJ	Visual Examination	Crimelite white, UV
	Wet Powder Suspension	Wetwop black (adhesive surface)
XFALAP	Wet Powder Suspension	Wet powder and water H2O
XK83P6	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	
XXG2TQ	Visual Examination	Used white light to examine.
	Wet Powder Suspension	Shook bottle of black Wetwop then painted it onto the white adhesive surface. Allowed solution to remain on adhesive surface for 20 seconds then rinsed with water. Allowed to dry and conducted a visual examination.
XYQNBJ	Cyanoacrylate Fuming	
	Powder Dusting	Black magnetic powder
	Wet Powder Suspension	Black Wetwop
Y2TMX3	Visual Examination	Item 2 was examined with white light and magnification. No prints were observed.
	Cyanoacrylate Fuming	Item 2 was processed in the Cyanosafe recirculation chamber (LP Unit). A control print was developed. No prints were observed.
	Gentian Violet	Item 2 was treated with Gentian Violet batch # 069. A print was observed on piece labeled D, but there is no discernible ridge detail.
	Wet Powder Suspension	Item 2 was treated with black wetwop. A print was observed on piece labeled D, but there is no discernible ridge detail. Adhesive and non-adhesive sides were treated.
	Dye Stain	Item 2 was treated with RAY batch #698. Item 2 was examined under magnification and Foster + Freeman Crime Lite ML2 with a 420nm-470nm bandwidth filter and orange barrier. No Prints observed.
Y339GW	Wet Powder Suspension	Air Dry

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
Y3JXPV	Liquid Nitrogen	
	Visual Examination	Flashlight and ambient light
	Wet Powder Suspension	~3-4 minutes per square
YEEKNY	Visual Examination	
	Alternate Light Source	
	Wet Powder Suspension	
YJMWN7	Visual Examination	No ridge detail observed.
	Cyanoacrylate Fuming	Processing Time: 0.50 hour; No ridge detail observed.
	Wet Powder Suspension	Processing Time: 0.50 hour; WetWop - Black: No ridge detail observed.
	Dye Stain	Processing Time: 1.0 hour; Dye Stain: MBD (4-(4-methoxybenzylamino)-7-nitrobenzofurazan). Viewed with forensic light source at 455nm using an orange barrier filter - Ridge detail preserved from adhesive side of tape labeled D.
YK7JMN	Wet Powder Suspension	Cyanoacrylate fuming chamber, + Control, Humidity 70%, 10 minutes fuming, Lot: UR18419, EXP: 10/2109, Black powder on silver side, Wet Wop Black on sticky side, EXP: 5/23/2028, rinse in cool water, let dry 24 hours
Z3GR2T	Visual Examination	Initial visual examination performed under white light, a CrimeScope CA-16-500 Alternate Light Source, and a TracER LASER.
	Wet Powder Suspension	Adhesive Side Powder used on adhesive side of items and viewed under white light.
Z3V97U	Polycyano	Frontside of the tapes: Polycyano. Machine: Foster&Freeman MVC3000, serial number 3286. Service: 27.3.19. Humidity 80%, Temperature 230 degrees, moisturise time 12 minutes, gluetime 20 minutes. Results: no fingerprints.
	Wet Powder Suspension	Backside of the tapes: The tapes were removed by using UNDO. After that we use black WetPowder. Results: fingerprint on tape D.

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
Z4B4R8	Visual Examination	LED white light and magnification
	Cyanoacrylate Fuming	Processing time 12 minutes, drying time 1 hour. Test print positive. LED white light and magnification
	Dye Stain	Gentian Violet Batch 069. Polilight 2 (530nm with a red filter). LED white light and magnification. A darker smudge could be seen on piece "D" however no ridge detail was present so it was not photographed.
	Wet Powder Suspension	Sticky Side Powder Batch 226. Adhesive sides. LED white light and magnification
	Powder Dusting	Black Magnetic Powder. Non-Adhesive sides. LED white light and magnification
	Dye Stain	RAY Batch 696. Polilight 2 (450nm with an orange filter)
Z94CTT	Visual Examination	Oblique lighting, ALS, RUVIS
	Cyanoacrylate Fuming	
	Visual Examination	ALS, RUVIS
	Dye Stain	Rhodamine 6G
	Visual Examination	ALS, RUVIS
ZA2ZGD	ULTRASOL + Black powder	Powder melted in ULTRASOL and after it lubricated the evidence with it. And finally washed.
ZAWK2R	Visual Examination	No fingerprint. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white.
	Wet Powder Suspension	Disclosing of a fingerprint. The fingerprint is visible the best in the white light source and 505 nm.
ZEVW74	Visual Examination	Natural light, white light, optical instruments.
	Cyanoacrylate Fuming	Processing time: 10 min, humidity: 80% (applies to the non-adhesive side).
	Visual Examination	White light /angle light, optical instruments.
	Wet Powder Suspension	Wet Powder Black applied to the adhesive side
	Visual Examination	Natural light, white light, optical instruments.
ZJL7F3	Visual Examination	Using white light 24/6/2019 at 8 AM
	Cyanoacrylate Fuming	8:30 am 120 c CNA plate temp and Humidity is 80 Rh White Light examination
	Dye Stain	1- Basic yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 Am and examined by using white light. 3- Sudan black at 12:30 PM and examined by white light
	Powder Dusting	1:30 PM and examined by white light
ZLAKXK	Wet Powder Suspension	Black EZFLO composed of: 15ml EZFLO SOLUTION, 15g ADHESIVE-SIDE POWDER DARK, 15ml distilled water

TABLE 2 - Item 2

WebCode	Development Methods	Method Details
ZMMCTM	Visual Examination	a bright white light was utilized; conducted on non-adhesive side as well as adhesive side.
	Cyanoacrylate Fuming	non-adhesive side of tape while stuck to wax type paper; visual exam to non-adhesive side conducted after processing. Performance check conducted CAF: 6/10/19 - passed. Fume cycle approx. 15 min. at 60% humidity.
	Crystal Violet	adhesive side only; dip method.
ZQ3Y7R	Visual Examination	07-22-19/1105 visually examined pieces of tape for latent prints
	Wet Powder Suspension	07-22-19/1115 prepared Sticky Side Powder mixture and ran pos/neg controls on gray duct tape supplied by lab. 07-22-19/1120-1130 applied Sticky Side Powder mixture to items A-D.

Response Summary

Participants: 267

Methods Utilized

Alternate Light Source	69	Physical Developer	1
Cyanoacrylate Fuming	80	Powder Dusting	35
DFO	0	Visual Examination	216
Dye Stain	63	Wet Powder Suspension	218
Ninhydrin	1	1,2-Indanedione	1

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

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
239ENG	Visual Examination	"3A", "3B", "3C", and "3D" were examined visually on 07/11/2019 - 1305 hours. No ridge detail was visible.
	Cyanoacrylate Fuming	"3A", "3B", "3C", and "3D" were processed with Cyanoacrylate on 07/11/2019 - approximately 1310 hours.
	Visual Examination	"3A", "3B", "3C", and "3D" were examined visually on 07/11/2019 - 1355 hours. No ridge detail was visible.
	Powder Dusting	"3A", "3B", "3C", and "3D" were processed with black fingerprint powder on 07/11/2019 - 1400 hours.
	Visual Examination	No ridge detail was developed on items "3A", "3C", or "3D." One fingerprint impression was developed on item "3B." An evidence quality 1:1 photograph was taken of the fingerprint impression and it was lifted.
26ZBDB	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	Ardrox (415 nm)
28T3R3	Visual Examination	
	Cyanoacrylate Fuming	Cyanoacrylate allowed to set for 24 hours.
	Powder Dusting	Sirchie Black Powder used.
28UHV8	Visual Examination	white light and magnification
	Cyanoacrylate Fuming	cyvac 40 minutes
	Powder Dusting	black powder
	Dye Stain	ray
2BAMCW	Visual Examination	Visual Examination on 7/11/2019 from 9:00am to 9:20am.
	Alternate Light Source	Alternate Light Source on 7/11/2019 from 9:25am to 9:50am.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming (Omega Print Fuming Compound - CNA102, Lot# 201903151) on 7/11/2019 from 10:00am to 10:35am. Positive reaction on Item 3B.
	Powder Dusting	Powder Dusting (Silk Black, Lot# 201711206) on 7/11/2019 from 10:40am to 10:50am. Positive development on Item 3B.
	Visual Examination	Visual Examination on 7/11/2019 from 10:50am to 10:55am. Item 3B is positive for a latent impression.
2KCPU9	Cyanoacrylate Fuming	
2T6MCM	Cyanoacrylate Fuming	fumed at 65% humidity for 30 minutes
	Dye Stain	RAM sprayed on and allowed to air dry

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
2UF84Q	Cyanoacrylate Fuming	Fume with cyanoacrylate in chamber at 80% humidity 20 minute purge time, 14 minute cycle, stained/dy with basic yellow premixed solution, vie with alternate light source.
2W77JA	Metallic latent print powder	Applied with brush / photograph
2WP89X	Visual Examination	Light and magnification were used. Control test was not applicable. No ridge structure was observed on either side of the metal roofing discs.
	Alternate Light Source	LabKam that emits 254 nm of light was used. Control test was not applicable. Ridge structure of collection value was observed on the non-labeled side of the metal roofing disk labeled "B". LabKam digital camera was used for collection.
	Cyanoacrylate Fuming	Control test was positive. Ridge structure of collection value was observed on the non-labeled side of metal roofing disk labeled "B". No photographs were taken until ridge structure was observed under LabKam.
	Alternate Light Source	LabKam that emits 254 nm of light was used. Control test was not applicable. Ridge structure of collection value was observed on the non-labeled side of metal roofing disk labeled "B". LabKam digital camera was used for collection.
	Dye Stain	Rhodamine 6G was used. Control test was positive.
	Alternate Light Source	Crimescope was used at a wavelength of 495 nm with orange goggles. Control test was not applicable. Ridge structure of collection value observed on the non-labeled side of metal roofing disk labeled "B". Digital camera with an orange lens was used for collection.
	Powder Dusting	Black Powder was used. Control test was not applicable. Ridge structure of collection value observed on the non-labeled side of metal roofing disk labeled "B". A digital camera and a tape lift with transparent backer were used for collection.
2ZPQJP	Powder Dusting	Dusted with black powder.
39TWFX	Visual Examination	
	Alternate Light Source	LAS, UV, CS
	Cyanoacrylate Fuming	FOLLOWED BY RUVIS
	Dye Stain	RAM FOLLOWED BY LAS, UV, CS

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
3DU74Y	Cyanoacrylate Fuming	06/28/2019: Cyanoacrylate Fuming Chamber(CFC) Processing: Before Processing: Filter Cycles - 191, Total Cycles – 675. Last Time Cleaned/Pre-filter Changed - 672/649. Cleaned prior to starting processing. Target Humidity Value - 70%. Purge Time - 10:00 minutes. Maximum Fume Cycle Time - 10:00 minutes. CFC Processing Start Time - 1727 hours. Target Humidity Value Reached/Fuming Cycle Started - 1731 hours. Fuming Cycle Ended/Purge Cycle Started - 1741 hours. Purge Cycle Ended/CFC Processing Completed - 1751 hours. Cyanoacrylate (+)Control - Lot#: UR18419, Exp: 10/19
	Powder Dusting	06/28/2019: Bi-Chromatic Powder Processing. Bi-Chromatic powder and fingerprint brush - Start Time - 1755 hours, End Time - 1801 hours
3KCRYN	Visual Examination	White light & ambient
	Alternate Light Source	Laser @ 535nm
	Cyanoacrylate Fuming	70min autoglue cycle
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black Powder
3T3U2E	Visual Examination	Examined with oblique lighting, ALS with orange goggles, UV lamp, and LASER with orange goggles.
	Cyanoacrylate Fuming	I placed the item in the superglue chamber and allowed it process for a few minutes. I examined the item using oblique lighting.
	Dye Stain	I processed the item with Ardrox and used the UV lamp to examine the item. I then processed the item with Rhodamine 6G and examined the item using the LASER and orange goggles.
	Powder Dusting	I powdered the item with super black powder.
3UV9HH	Visual Examination	Visual examination under white light and magnification.
	Cyanoacrylate Fuming	Cyanosafe set up with 4 drops of cyanoacrylate in three (3) small metal cups on a hot plate, distilled water well filled, and test print placed inside. Chamber ran for 12 minutes followed by the Purge process. Process complete and item allowed to dry for one (1) hour. Test print positive.
	Powder Dusting	Black powder applied with a brush.
	Dye Stain	RAY batch #700. Item completely covered in RAY stain for approximately one (1) minute, rinsed under water until all excess solution was removed, patted dry with a paper towel, and allowed to air dry completely.
3UWHLV	Visual Examination	White and UV light.
	Cyanoacrylate Fuming	RH 80%, 7 min.
	Dye Stain	Basic Yellow 40 (ethanol-based), about 20 s.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
3XFF8Z	Visual Examination	
	Alternate Light Source	365nm, 450nm, 532nm
	Cyanoacrylate Fuming	
	Dye Stain	
3ZK69N	Visual Examination	nothing
	Cyanoacrylate Fuming	saw weak print
	Dye Stain	Basic Yellow 40, saw clear print
473XWT	Visual Examination	No latent print impressions observed.
	Cyanoacrylate Fuming	CAE fuming in chamber for approximately 15 minutes. No latent print impressions observed.
	Dye Stain	Rhodamine 6g dye stain utilized, followed by methanol rinse. No latent print impressions observed.
	Alternate Light Source	Coherent Tracer Laser utilized, 532nm. Enhancement observed and photographed.
	Powder Dusting	Black dusting powder utilized. Enhancement observed and photographed.
49ZML2	Alternate Light Source	Tracer 532 nm (green light) for inherent fluorescence and was positive.
	Lumicyano	Combination of Cyanoacrylate fuming and dye staining. Latent print showed improvement
49ZP9K	Cyanoacrylate Fuming	Visual exam with FLS, no visible ridge detail found. Item then processed with cyanoacrylate. Ridge detail was developed with CA, however was only visible with FLS 450nm and orange filter. Photographic documentation not possible at this point. In an attempt to further develop the ridge detail, a dye stain (MRM10) was applied. After photographic documentation of dye stain results, mag. powder was attempted in further developing the ridge detail. MRM10 tested prior to application, and performed as expected.
4AM3FN	Cyanoacrylate Fuming	Air Science superglue chamber, 15 minutes, 80% humidity, 72° Fahrenheit
	Dye Stain	Rhodamine 6G dye stain, Bright Beam laser exam (532nm/used orange goggles)
4APPW3	Visual Examination	No prints were observed.
	Cyanoacrylate Fuming	Eight minutes for processing.
	Visual Examination	No prints were developed at this stage.
	Dye Stain	Rhodamine 6G was used. Items were viewed using an alternate light source at a 532nm wavelength with orange goggles.
	Visual Examination	A print was developed on the piece of metal labeled B.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
4HWDLU	Cyanoacrylate Fuming	Super glue (approx. 8 drops), 3 mins, with 68 RH, vent for 30 mins,
	Dye Stain	Applied RAM (fluorescent dye stain), let it dry for 10 mins
	Alternate Light Source	Viewed under UV light
4KB2JT	Visual Examination	Oblique and direct lighting
	FSIS	Shortwave UV light and specialized filter - One impression captured (photographed) on piece B
	Cyanoacrylate Fuming	15 minute fume cycle @ 74% humidity and 5 minute purge cycle
	FSIS	Shortwave UV light and specialized filter - One (same) impression re-captured (photographed) on piece B
	Dye Stain	Rhodamine 6G (R6G) working solution was sprayed on the item - allowed to dry
	LASER	Light source (Laser) and orange goggles were used to visualize due to dye stain
4QUHUH	Visual Examination	
	Cyanoacrylate Fuming	MVC 5000/D - Fumed for 15 minutes.
	Powder Dusting	Black powder was applied to the evidence.
4RRAUQ	Visual Examination	Ambient and LED
	Cyanoacrylate Fuming	
	Powder Dusting	Black powder only
4UV3L4	Cyanoacrylate Fuming	fumed in chamber for 10 minutes
	Powder Dusting	Black powder
629FZT	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
63PT3P	Visual Examination	Visually examined the metal discs A-D, no prints observed.
	Cyanoacrylate Fuming	Fumed the metal discs in chamber for approximately 12 minutes with hot water for humidity.
	Powder Dusting	Applied black powder to the metal discs with brush.
6BZADW	Visual Examination	fluorescent lighting
	Cyanoacrylate Fuming	cyanosafe, fluorescent and LED lighting
	Dye Stain	RAY, crimelite ml2 450nm with orange filter
	Powder Dusting	black powder, fluorescent lighting, ridge detail on disc "B"

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
6FLQNF	Visual Examination	white light , natural light and UV light (350nm). No fingerprint observation
	Cyanoacrylate Fuming	No fingerprint observation
	Dye Stain	ardrox . Telltaled a fingerprint in the silver duck disc "B"
6MUQ3W	Visual Examination	Tracer, Rofin Blue/ Green Light Source
	Cyanoacrylate Fuming	Misonix fume chamber, Amb. Lights
	Cyanoacrylate Fuming	(LUMI) CApture-BT fume chamber, Rofin Green Light Source
6TVK4Y	Visual Examination	Examined using a flashlight and ambient room light
	Cyanoacrylate Fuming	Fumed in chamber at 73F and 70% humidity. Examined using flashlight and ambient room light
	Dye Stain	Rhodamine 6G dye stain, examined using Laser @ 532nm with orange barrier filter
6WW8YN	Visual Examination	Item 3 is stored in a 8x10 manila envelope with a red strip of evidence tape with "CTS" written on it. Item 3 was observed to be four small, circular metal disks stored in small manila envelopes marked A through D. The disks were also marked A through D. The disks were visually examined first without an alternate light source, then examined under a Krimesite scope. A suitable friction ridge pattern was observed on the disk marked B, and photographed with a DSLR camera attached to the Krimesite scope.
	Cyanoacrylate Fuming	Each disk was fumed with Cyanoacrylate in a fuming chamber with a relative humidity of 80% for a twenty minute period.
	Powder Dusting	Each disk was powder processed with conventional black powder.
6XPGTP	Visual Examination	06/03/2019 at 1302 hours. Negative result
	Alternate Light Source	06/03/2019 at 1310 hours. Green Laser 532 nm used an orange filter. Visible inherent luminescence on the back of metal disc labeled "B". Ridge detail visible, right loop
	Cyanoacrylate Fuming	06/04/2019 at 0610 hours. CA6000 Formula 201806011. 26 minutes in chamber
	Powder Dusting	06/04/2019 at 0658 hours. Black Powder. Ridge detail visible, right loop
6XU4EQ	Visual Examination	With ambient light and a flashlight
	Lumicyano Fuming	35 minute fume, 10 minute purge with Lumicyano powder and solution
	Alternate Light Source	390-520 nm with yellow and orange filters
	Dye Stain	Ardrox
	Alternate Light Source	350-445 nm with yellow filter
	Powder Dusting	Black fingerprint powder

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
6YQH7P	Visual Examination	I performed a visual examination on the back side of the four roofing discs. I did not observed any ridge detail.
	Cyanoacrylate Fuming	I placed all four discs in the fuming chamber that contained a hot plate with superglue and a beaker of hot water for humidity. I closed the chamber doors and turned on the hot plate to heat the superglue for approximately 30 minutes. After I saw my control develop white ridges, I turned off the hot plate and purged the chamber for another 10 minutes. After purging the chamber, I removed the four discs from the chamber.
	Powder Dusting	Using black powder and a brush, I applied the black powder to the back side of all four discs. I observed ridge detail on disc B.
6ZW4FN	Cyanoacrylate Fuming	Processing time = approximately 20 mins. CFC chamber at 70% humidity - 10 min. cycle followed by 10 min. purge cycle. CFC positive control tested +. Lot #UR18419 Exp 10/2019
	Powder Dusting	Biochromatic powder used to dust both sides of metal roofing discs (A-D)
73EDUL	Visual Examination	White light and 532nm Laser. Inherent luminescence on item B. Photographed.
	Cyanoacrylate Fuming	Fumed in CA-6000 fume chamber. Visual using 523nm laser. No improvement on latent print on item B.
	Dye Stain	R6G in methanol carrier applied. Let dry and used 532nm laser. Print degraded some. Captured with Nikon D700.
76LDCL	Visual Examination	visual exam with magnification
	Cyanoacrylate Fuming	15 minute fume time, 72 degree F, 80% humidity
	Dye Stain	R6G(MeOH) dye stain, Laser exam/532nm/used orange goggles
7FLBNN	Visual Examination	No visible print
	Cyanoacrylate Fuming	Cabinet: Foster&Freeman MVC3000, time 20 minutes, temperature 120 celsius.
	Alternate Light Source	Print was visible with UV light
	Powder Dusting	Carbon powder
7LUTPF	Visual Examination	Notepage photography
	Cyanoacrylate Fuming	Fumed in chamber 15 minutes
	Powder Dusting	Black powder
7P98WG	Visual Examination	direct and siding lighting
	Alternate Light Source	view between 455-515, UV lighting flash light
	Cyanoacrylate Fuming	chamber for 20 minutes for fuming
	Dye Stain	Apply RAM, Air dry in hood, Alternate light source 455-515
	Powder Dusting	apply Black powder with brush

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
7PP9WX	Cyanoacrylate Fuming	1. Visual examination with white light, mini-crimeskope and crime-lite 42S. 2. Payton Cyvac M forensic Fingerprint vacuum Machine. 3. Visula examination with white light, mini-crimeskope and crime-lite 42S. 4. Figerprint powder, concentrated Black, BVDA. 5. Visual examination with white liht, min crimeskope and Crime-lite 42 S. 6.WHite mikrosil for lifting the fingerprint.
7R2VGX	Visual Examination	
	Alternate Light Source	(415 nm)
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	Ardrox (415 nm)
7XMT6K	Visual Examination	A visual examination using oblique lighting was conducted on Item 3 prior to processing.
	Cyanoacrylate Fuming	A SAFE FUME Chamber set at 65% relative humidity and 23 degrees Celsius was used for a processing time of 30 minutes, along a Test Print and Item 3, Metal Roofing Discs A-D. (Lot# 201810048)
	Visual Examination	A second visual examination using oblique lighting was conducted.
	Powder Dusting	Four metal roofing discs items A-D were processed with Black Magnetic Powder. One latent print was developed on Item 3 Disc B. Discs A, C & D displayed no latent prints.
839ARU	Polycyano	20 min. 230 C
83E4PN	Visual Examination	
	Cyanoacrylate Fuming	Superglue chamber used (MVC 5000). Fumed for 20 minutes
	Powder Dusting	Black Powder
8B6ZGC	Visual Examination	
	Alternate Light Source	white light, ALS 425-530mm
	Cyanoacrylate Fuming	Peavy Print Glue, ~76.1 degrees Farenheit, ~80% humidity, 20 minutes in fuming chamber.
	Powder Dusting	Peavy Black Powder
8DXW76	Visual Examination	
	Alternate Light Source	(415 nm)
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	RAM (415 nm)

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
8DZ8WM	Visual Examination	Oblique lighting with magnification
	Cyanoacrylate Fuming	Fumed for 20 minutes with approx. a quarter amount of superglue and hot water in the chamber for humidity
	Powder Dusting	Regular black powder used with a new disposable brush
8LA4NU	Visual Examination	VIS, UV,fingerprint - section B
	Cyanoacrylate Fuming	about 2 min, 120 degree C, fingerprint - section B
	Dye Stain	Basic Yellow 40, fingerprint - section B
8REWUJ	Cyanoacrylate Fuming	Mason Vactron MVC5000 cabinet no. 4. Superglue batch no. 62514 (SURELOC CA 5 #062514). Auto cycle processing applied (15 minute fuming cycle). 120C superglue heating plate, 75-90% RH range, ambient cabinet temperature. Control test positive.
	Dye Stain	Basic Yellow dye stain (SIRCHIE) applied post cyanoacrylate processing. Batch no. 15AS939. Dye contains Ethanol 96% and Basic yellow stain. Control test positive.
	Solvent Black	Solvent Black solution applied post Superglue/Dye treatment to simulate sequential processing for serious/major crime, as per internal laboratory procedures to allow for a range of treatments to be CTS tested. Solution contains Solvent Black 3, 1-Methoxy-2-propanol (PGME), Water. Batch no. 15AS940.
8UMKDZ	Visual Examination	This was completed using white light and magnification. If a print is observed it will be photographed.
	Cyanoacrylate Fuming	Item is placed within the cyanosafe chamber. 4-5 drops of glue is placed in each tin and then the tin is placed on the heat plate. The water area is checked to make sure there is sufficient water to create the proper humidity amount in the chamber. A test print is placed within the chamber to make sure it is functioning properly. The chamber runs for 12 minutes and then goes into a purge cycle. The item then sits for 1 hour to harden the superglue. Once the hour has expired the test print is checked and then the item is examined using white light and magnification.If a print is observed it will be photographed.
	Powder Dusting	Black latent print powder is used. The powder is applied by using a latent print brush. The item is then examined using white light and magnification. If a print is observed it will be photographed or lifted.
	Dye Stain	RAY is applied to the whole item. The item can be dipped or painted on. It should remain on the item for approximately 1 minute. The excess dye is then washed off with tap water. The item is patted to remove excess water and then air dried. The item is then examined with a fluorescent light source. Using an orange filter. If a print is observed it will be photographed.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
8WRRJT	Cyanoacrylate Fuming	1.Putting cyanoacrylate(super glue) into the developing chamber on a warming plate. 2.Placing Item3 into the developing chamber and allowing time for the latent fingerprint to develop. 3.Viewing Item3 with RUVIS.
8WT74L	Cyanoacrylate Fuming	Vacuum fuming, approx. 30 minutes.
	Powder Dusting	Black powder dusting.
8X4RTM	Cyanoacrylate Fuming	Visual examination. Positive control of Cyanoacrylate conducted with appropriate results (Lot:UR18419, exp:10/2019). Item of evidence subjected to one cycle in a fuming chamber (10 min fume cycle, 10 min purge cycle at 70% humidity)
	Small Particle Reagent	Positive control of Small Particle Reagent (SPR) conducted with appropriate results (Lot:201901185, exp:02/2022). Brush application. Light rinse - allow to dry
983NTP	Visual Examination	Visual examination with white light and magnifying glass, no findings.
	Cyanoacrylate Fuming	Using Cyvac M-BJ fuming cabinet. 5 x 6 drops of BVDA B-83000 cyanoarcylate glue. Air pressure: 20-24 inHg, temperatures: glue heater 82°c and pressure chamber 37°c. Processing time in the fuming cabinet 30 minutes. After that print was clearly visible in disc B, prints on test object was also clearly visible.
	Powder Dusting	Final improvement with carbon powder.
987M9X	Visual Examination	White light and magnification
	Cyanoacrylate Fuming	CyanoSafe Recirculation Chamber (Crime Scene Unit, 12 minute run time, test print positive), LED light and magnification
	Dye Stain	RAY; Batch #696, examination using Foster + Freeman Crime Lite ML with a 460nm-510nm bandwidth filter and orange barrier
	Powder Dusting	Black powder, LED light and magnification
9DVGFQ	Visual Examination	forensic light source
	Cyanoacrylate Fuming	120°C, 80% rel. humidity, 10min.
	Dye Stain	Basic Yellow
9FWRZT	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
9HQWWR	[No Methods Reported.]	(1) Visual Examination with oblique magnified lighting. (2) Superglue fume; used chamber. (3) Dye Stain RAY then viewed under ALS Laser - blue light (445nm) and OCB filter.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
9JXVUZ	Visual Examination	White light and magnification - no lats
	Alternate Light Source	Exam laser/orange filter - no lats
	Cyanoacrylate Fuming	Fumed then examined with RUVIS and oblique light - 3B to photo; others - no lats
	Dye Stain	Sprayed with RAM (Rhodamine 6G/Ardrox/MBD mixture), dried, and examined with ALS (laser/UV) - 3B to Photo; others - no lats
	Powder Dusting	Brushed lightly with black powder - 3B to Photo; others - no lats
9U36XX	Visual Examination	Ambient lighting. Tracer Laser; 505nm with orange goggles
	Lumicyano	CApture-BT chamber, 17:00 processing time. Tracer Laser, 505nm with orange goggles
ABJ7U8	Visual Examination	flashlight, LASER, UV
	Cyanoacrylate Fuming	
	Dye Stain	Ardrox visualized with UV
	Dye Stain	Rhodamine 6G visualized with LASER
	Powder Dusting	
AFRU6M	Visual Examination	
	Alternate Light Source	365nm, 450nm, 532nm
	Cyanoacrylate Fuming	Visual and RUVIS
	Dye Stain	RAM, 365nm, 450nm, 532nm
AG7WEG	Visual exam, Rhodamine 6G, Black Powder	Visual exam - white light. Rhodamine 6G - dye stain, sprayed, air-dried, viewed under green laser. Black powder - Viewed under white light
AJWNJD	Visual Examination	Examined with white light and magnification on 06/04//19
	Cyanoacrylate Fuming	Examined with white light and magnification on 06/04//19
	Dye Stain	RAY on 06/09/19, Batch 698,submerged then rinsed with water and air dried. Examined with Pollilight 450nm and orange filter
	Powder Dusting	Dusted with black powder. Examined with white light and magnification on 06/04//19
ALGAVF	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	Used Black powder. Found print on Disc "B".
AN7KQE	Cyanoacrylate Fuming	super glue, humidity approx 70, hot plate, super glue on dish, approx 3 min process.
	Powder Dusting	Used Foster Freeman fingerprint powder Natural 2 Blue
	Dye Stain	stain with RAM

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
ANLYYN	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Visual Examination	
	Alternate Light Source	
	Dye Stain	
	Alternate Light Source	
APZ6Y6	Visual Examination	under different types of light
	Powder Dusting	lumicyano powder/solution 4%, hygrometry > 75% - 15 minuts
	Dye Stain	Ardrox
AR8J8Y	Visual Examination	
	Alternate Light Source	White and blue light
	Cyanoacrylate Fuming	CNA-treated for 4 minutes in 80% Rh, 1,3 gram cyanoacrylate. Then sprayed with BY40 solution, examinated with bluelight source 440 nm.
	Wet Powder Suspension	Treated with black powder suspension.
AY6E2Q	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
B2P7LD	Visual Examination	A visual examination of items completed prior to administering chemical development methods.
	Powder Dusting	All four (4) medallions were dusted with a standard black powder. One (1) latent print was developed on medallion "B."
B2QU9H	Visual Examination	Natural light and magnification
	Cyanoacrylate Fuming	Items were placed in an atmospheric chamber with Cyanobloom liquid, heated to 120 degrees Celsius & 80% humidity for 10 minutes.
	Dye Stain	Rhodamine 6G dye-stain was squirted over each piece; viewed with an Orange filter at 515nm.
B3LGPT	Visual Examination	Ambient lighting and green/Tracer laser
	Lumicyano	17 minute fume time

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
B3LJCC	Visual Examination	No latent prints observed.
	Cyanoacrylate Fuming	No latent prints developed.
	Dye Stain	MRM-10. Latent prints developed.
	Dye Stain	Basic Yellow. No further latent prints developed.
	Dye Stain	Red-drox. No further latent prints developed.
	Methanol Rinse	No further latent prints developed.
B6N4WK	Cyanoacrylate Fuming	Super glue 3 min water temp 160', 60 % humidity
	Dye Stain	RAM dye stain
	Alternate Light Source	ALS 495 nm
B7GRJM	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
B9QTL7	Visual Examination	Visible reflection + fluorescence (alternate light source). Room temperature = 24°C. Relative humidity = 74 %
	Cyanoacrylate Fuming	Lumicyano PowderTM. Glue temperature = 118°C. Relative humidity = 78 %. Processing time = 40 mn
	Visual Examination	Visible reflection + fluorescence (alternate light source). Room temperature = 24°C. Relative humidity = 74 %
BQNHTF	Cyanoacrylate Fuming	Processed with cyanoacrylate fuming for approximately 20 minutes. Then processed with black powder and brush.
BWHUX8	Visual Examination	side lighting with white light
	Alternate Light Source	Wavelengths 415nm, 450nm, 505nm, & 530nm
	Cyanoacrylate Fuming	SafeFume Chamber (20 minutes ar ~80% humidity, ~72.3 degrees F.)
	Powder Dusting	Silk Black (Volcano) Latent Print Powder
C2A6HB	Cyanoacrylate Fuming	80% RH, 5 min phttps://www.cts-portal.com/testing/beginTest/#rocessing
	Dye Stain	Basic Yellow 40 in ethanol
C47AWB	Cyanoacrylate Fuming	CNA-treated for approximatley 4 min in 80% Rh. Put cna glue on heater upp to 120 degree C. Then Spray with BY40 solution and blue lightsource 440 nm.
	Wet Powder Suspension	Treated with black powder

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
C4BP9B	Visual Examination	white light, UV - 555 nm - Polilight PL 500, suitable googles
	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
C7X9CU	Visual Examination	White light, ALS
	Cyanoacrylate Fuming	
	Dye Stain	R6G, Laser
	Powder Dusting	Conventional Powder
C88VKD	Visual Examination	Ambient light
	Alternate Light Source	Foster + Freeman Crime-lite ML2. Green 480-560 nm and Blue 420-470 nm. No filter, red filter, orange filter, and yellow filter
	Cyanoacrylate Fuming	Cyanoacrylate Ester in CA-6000 Cyanoacrylate Fuming Chamber. 65% relative humidity for 30 minutes
	Visual Examination	Ambient light
	Dye Stain	R.A.M. Applied with squirt bottle. Air dried
	Alternate Light Source	Foster + Freeman Crime-lite ML2. Green 480-560 nm and Blue 420-470 nm. No filter, red filter, orange filter, and yellow filter
CA4KGB	Visual Examination	Used a flashlight with white light and ambient lighting.
	Cyanoacrylate Fuming	Used a vacuum chamber set to 25 PSI and fumed for twenty minutes. Used a flashlight to examine processed discs.
	Visual Examination	Used a flashlight with white light.
	Dye Stain	Used R.A.M. to spray discs and then allowed them to dry.
	Alternate Light Source	Examined discs with an alternate light source (Rofin Polilight PL500) at 505nm with orange goggles.
	Water rinse after dye stain	Rinsed item 3B with tap water after application of dye stain to attempt to remove background dye staining.
	Alternate Light Source	Examined item 3B with an alternate light source (Rofin Polilight PL500) at 505nm with orange goggles.
	Wet Powder Suspension	Used Powder Suspension Solution "PSS" (precipitated magnetic iron oxide in Kodak Photo-Flo and water) - brushed solution onto items and allowed to sit for approximately 10 seconds before rinsing off with tap water.
	Visual Examination	Examined items with flashlight and ambient light.
CFNP63	Visual Examination	Under different types of light
	Cyanoacrylate Fuming	fuming with Lumicyano observation under white light and UV light

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
CJM3TU	Visual Examination	In daylight and flashlight none fingerprint. In spectrum of Polilight PL 500 (UV, 450, 530) fingerprint has been disclosed in section - B
	Cyanoacrylate Fuming	No improvement in a fingerprint quality
	Dye Stain	type of dye stain - Basic Yellow 40; improved fingerprint quality has been achieved
CPAVWG	Visual Examination	With different kinds of light sources. White, sidelong, blue and green. Blue light with yellow filter pos. one fingerprint was photographed.
	Cyanoacrylate Fuming	Processing time 10 min, 2 g CNA, Rh 80%. Same fingerprint as above.
	Powder Dusting	Carbon powder. Pos
CQ9GTY	Visual Examination	Using white light and magnification, item was examined for prints.
	Alternate Light Source	Using a Crime Lite ML2 (420nm-470nm, orange filter), item was examined for prints.
	Cyanoacrylate Fuming	Using the Air Science SafeFume 1, item was processed for 20 minutes and allowed to set for 1 hour. (A test print developed) Item was then examined for prints.
	Powder Dusting	Item was processed using a fiberglass brush with black print powder on it. Item was examined for prints.
	Dye Stain	Item was was dipped into a dish with R.A.Y. batch #698, rinsed off and allowed to dry. Item was examined for prints.
CYXQXH	Polycyano	Foster&Freeman's polycyano dye: 0,6g Foster&Freeman MVD-1000 fuming chamber: 230'C, 80%, 25min.
D3FN36	Powder Dusting	Visual exam, cyanoacrylate fuming (40 mins), R6G dyestain (5 mins), Laser (5 mins), Black Powder -optional)
D62QQP	Visual Examination	A visual examination was conducted with forensic light sources using wavelengths form 450 nm to 650 nm as well as with white light. A green laser (Tracer) was used to check for inherent fluorescence.
	Lumicyano Fuming	The metal discs were fumed with LUMI in a Superglue Chamber (CApture-BT). The relative humidity in the chamber was 75% and the LUMI was heated up to 121 degrees C. It to the Humidity cycle 8 minutes and 34 seconds to get up to humidity. The fume time was 17 minutes and the purge cycle was 5 minutes.
	Dye Stain	Basic Yellow was used. Basic Yellow was sprayed onto the disc then rinsed using cool tape water. The Discs were left to dry.
D8RRWD	Alternate Light Source	
	Cyanoacrylate Fuming	~70 min
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black powder

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
DHMMQG	Powder Dusting	Processed with black powder and an acrylic brush. Latent Print developed on "B"
DJKN2E	Visual Examination	No visible latent prints were found during the initial visual exam.
	Cyanoacrylate Fuming	The discs were hung from the racks of our Foster Freeman MVC3000 CA Chamber and were fumed with Cyanoacrylate Ester. The system is automated, the chamber brings the humidity up to approximately 80% RH. From start to finish the chamber runs approximately 45 - 50 minutes.
	Visual Examination	6/25/19 - No visible latent prints were found during post CA visual exam.
	Powder Dusting	6/25/19 - Black fingerprint powder was applied to the metal discs.
	Visual Examination	One (1) latent fingerprint was developed on the metal disc labeled B.
DKVPND	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black
DPM2GP	Visual Examination	
	Alternate Light Source	(445 nm)
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	RAM (445 nm)
DQHM4N	Visual Examination	N/A
	Alternate Light Source	N/A
	Cyanoacrylate Fuming	N/A
	Dye Stain	RAM
DWQ4LP	Visual Examination	Visual examination, no friction ridges observed.
	Cyanoacrylate Fuming	Cyanoacrylate fuming using Mason Vactron chamber.
	Dye Stain	Rhodamine 6G dye stain applied.
	Alternate Light Source	Examination under Polilight ALS using orange filtered glasses. Print observed on back of disc labeled "B"

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WebCode	Development Methods	Method Details
E6GQ9E	Visual Examination	Faint patent print ridge detail could be seen with visual inspection prior to processing.
	Cyanoacrylate Fuming	Item #3 was processed using CA to develop any ridge detail. Ridge detail was developed. Due to the complex pattern on the item, further processing was deemed necessary.
	Dye Stain	Item #3 was dye stained with R6G and rinsed with methanol. The R6G dye stained ridge detail is fluorescent when viewed using an ALS/Laser.
	Alternate Light Source	The ALS/Laser was used to fluoresce the R6G dye stained ridge detail. Contrast and clarity of the R6G dye stained ridge detail improved when compared to the CA ridge detail.
EEK47U	Visual Examination	WHITE LIGHT / RUVIS 254nm / LASER 532nm
	LUMICYANO	250 DEGREES F, 17 MINUTES FUMING TIME, 75% HUMIDITY - VIEW WITH LASER 532nm AND ORANGE GOGGLES
EMV3Z6	Visual Examination	
	Cyanoacrylate Fuming	Chamber settings: 60% humidity, fume time 15 minutes, auto-purge time 10 minutes.
	Dye Stain	Basic Yellow-40 dye stain utilized. Allowed to dry for approximately 10 minutes.
	Alternate Light Source	455 nm blue light used with 550 nm orange filter.
EP3KY2	Visual Examination	I started with a visual examination using UV/ALS/Laser/Flashlight light sources. Using the FSIS camera, I visualized a latent impression.
	Cyanoacrylate Fuming	I then processed the metal discs with Cyanoacrylate Fuming and using the FSIS camera, I visualized a latent impression.
	Dye Stain	Using a squirt bottle, I applied Ardrox to the metal discs and allowed them to dry. I observed a latent impression when applying a UV light source.
	Dye Stain	Using a squirt bottle, I applied Rhodamine 6G to the metal discs and allowed them to dry. I observed a latent impression when applying a Laser light source.
	Powder Dusting	I applied black fingerprint powder to the metal discs using a fingerprint brush. I observed a latent impression.
EWNDCL	Visual Examination	Using white light 24/6/2019 at 8 am
	Cyanoacrylate Fuming	8:30 am 120 c CNA plate temp and humidity is 80 Rh White Light examination
	Dye Stain	1- Basic yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 Am and examined by using white light. 3- Sudan black at 12:30 PM and examined by white light
	Powder Dusting	1:30 PM and examined by white light

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WebCode	Development Methods	Method Details
EZNP9L	Visual Examination	Using white light 24/6/2019 at 8 am
	Cyanoacrylate Fuming	8:30 am 120 c CNA plate temp and humidity is 80 Rh White Light examination
	Dye Stain	1- Basic yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 Am and examined by using white light. 3- Sudan black at 12:30 PM and examined by white light
	Powder Dusting	1:30 PM and examined by white light
F3MZGC	Visual Examination	White light
	Cyanoacrylate Fuming	White light
	Dye Stain	Rhodamine 6-G Alternate light source
	Powder Dusting	Black powder White light
F9UVF9	Visual Examination	white light including angled
	Cyanoacrylate Fuming	Chemical; low viscosity cyanoacrylate adhesive manufacturer Sureloc adhesives and sealants batch number 62514 weight = 3.18g. Treated using a Foster and Freeman MVC500 superglue fuming cabinet, treatment time 15 min at relative humidity of greater then 80%. Cyanoacrylate vaporised at 120 degrees C. Control sample positive
	Dye Stain	Chemicals; BY40 dye - our batch number 15AS938 made of ethanol batch number 18/2220B1 and basic yellow dye batch number 201810063. Treated by immersion in dye and rinse in tap water. Control sample positive.
	Solvent Black 3	Chemicals; Our solvent 3 batch number 15as940 made of solvent black 3 powder batch number 020414F, 1 methoxy 2 propanol batch number STBH7830. Treated by immersion in solvent black 3 liquid for between 10 seconds and 1 minute, rinse in tap water. Control sample positive.
FG83XX	Cyanoacrylate Fuming	Visual examination (000-495nm); photography; basic yellow; humidity 83%; temperature 130°c; vacum metal deposition

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WebCode	Development Methods	Method Details
FP28QY	Visual Examination	Non-marked side of all four metal discs (A, B, C and D). ~10mins to include photography on disc C. Note, this area was a smudge would not have been preserved in regular case work, was captured because it was an area of disturbance.
	Alternate Light Source	~350nm to ~620nm ~2.5 hrs; non-marked side of all four metal discs (A, B, C and D). Time includes photography on discs A and B. Latent on disc B was a loop. The area on disc A were possible pores, not suitable for capture in real case work. The majority of the time was spent attempting to capture a suitable image of that area on disc A, had issues with the finish and the reflectivity best viewed at UV.
	Cyanoacrylate Fuming	Non-marked side of all four metal discs (A, B, C and D). ~40 mins includes fume time air out and set-up and visual examination.
	Dye Stain	Applied M10 to the non-marked side of all four metal discs (A, B, C and D); ~10mins includes control, application on items and visual exam with the FLS.
	Powder Dusting	Black power applied to the non-marked side of all four metal discs (A, B, C and D); 10mins. Includes application exam and photographing latent on disc B.
FRTMGF	Visual Examination	Flashlight
	Alternate Light Source	ALS 455-515 nm
	Cyanoacrylate Fuming	21 minutes processing time
	Powder Dusting	black powder
FWHKRJ	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	
G4XLN8	Visual Examination	Nothing noted
	Powder Dusting	Latent print developed on item B, negative for a,c, and d.
G73WD2	Cyanoacrylate Fuming	
	Visual Examination	Reflected Ultraviolet Light Imaging
	Dye Stain	Rhodamine 6G
	Alternate Light Source	Laser 532nm. Friction ridges detected during laser examination
G8EC82	Cyanoacrylate Fuming	Processed circular metal discs and control in super glue chamber for 30 minutes
	Dye Stain	Applied R6G to the discs and allowed to dry.
	Alternate Light Source	Visually examined the discs with the laser, orange goggles and magnifier. Nothing developed.

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WebCode	Development Methods	Method Details
GBDAJ9	Visual Examination	First viewed samples under natural and forensics ligths. In this case we could not see fingerprints.
	Cyanoacrylate Fuming	The fuming was initiated in the fuming chamber at lats 15 minutes with 65% Humidity. After that the sample was viewed with natural and forensic ligth.
	[No Methods Reported.]	Staining with Basic Yellow: It is applied with a spray application, washed in water and air dried. Viewed with forensic ligth at 415nm using yellow goggles.
GHELE7	Visual Examination	With diferent light sources in various vave length
	Cyanoacrylate Fuming	CNA-treated and then sprayed with BY40 solution
GLBBVD	Visual Examination	No visible print.
	Alternate Light Source	Weak partial print visible with UV-light
	Cyanoacrylate Fuming	Cabinet: Foster&Freeman MVC300, humidity 80%, temperature 120 degrees
	Powder Dusting	Carbon powder
GMRXDD	Visual Examination	Examined metal discs with oblique lighting for visible prints.
	Alternate Light Source	Examined tape with ALS at wavelengths 415-515nm for visible/fluorescing prints.
	Cyanoacrylate Fuming	Fumed discs in CyanoSafe for twenty minutes.
	Powder Dusting	Dusted both sides of discs with black powder.
GR7FUU	Visual Examination	Fluorescent lighting exam.
	Cyanoacrylate Fuming	CyanoSafe for 20 minutes. Rested for 1 hour. Control positive.
	Powder Dusting	Black powder used.
	Dye Stain	Ray dye stain for 30 seconds.
GWWQ38	Visual Examination	Note page photos taken.
	Cyanoacrylate Fuming	20 minutes in chamber.
	Powder Dusting	Black powder applied.
H6N8WN	Visual Examination	visual examination natural light, illuminator Polilight PL 500 UV,entire range wavelenght of light and filtres. During visual examination the trace was't recovered.
	Cyanoacrylate Fuming	Cyanoacrylate Fuming Chamber Catri temp. 36C, 15 nim, humidity 80%, white light illumanator Polilight PL 500. The trace was recovered.
	Basic Yellow 40	Basic Yellow 40 - sprayed,illuminator Polilihgt PL 500 350-505 nm, filtres 570-590 nm.

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WebCode	Development Methods	Method Details
H9PTLR	Visual Examination	The items were visually examined using a white LED light source under magnification.
	Alternate Light Source	The items were examined for the presence of inherent luminescence using Crime Lite ML (460-510 nm: Orange Filter) under magnification.
	Cyanoacrylate Fuming	The items were processed by placing approximately 5 drops of cyanoacrylate into 3 metal dishes (Total of 15 drops). The metal dishes were placed onto a heating plate. Distilled water was placed in a reservoir inside the chamber to maintain humidity. A test print was created, and placed inside the chamber. Items were placed into the chamber with consideration to space evidence far enough apart to allow CA vapors to circulate between items. The chamber was set to fume for approximately 12 minutes. The test print was checked for visible development of the latent print. Items were left undisturbed for 60 minutes to allow the CA coating to harden. Items were examined using LED lighting under magnification.
	Dye Stain	A fluorescent dye stain was used, containing Rhodamine 6G, Ardrox Tracer-Tech P133D, and Basic Yellow 40 (RAY). The items were processed by immersing in a tray of RAY, agitating for approximately 1 minute, items were rinsed off under a gentle flow of cold water. The items were gently patted dry and placed under a fume hood to complete drying. The items were examined using Crime Lite ML (460nm-510nm filter): Orange Filter under magnification.
	Powder Dusting	The items were processed by picking up a small amount of powder(black)on the ends of the latent print brush bristles, and shaking off excess powder. The powder(black) was brushed gently over the surface of the items using circular strokes. Items were examined using LED lighting under magnification.
HAJH4M	Powder Dusting	The metal circular discs marked "3A, 3B, 3C and 3D" were processed using black fingerprint powder and a brush for the development of latent prints. Latent prints of possible value observed on disc labeled "3B".
HDF948	Alternate Light Source	Crimescope: 415nm - 535nm with yellow, orange, and red filter
	Cyanoacrylate Fuming	CA-6000: 65 percent relative humidity; 30 minute exposure
	Alternate Light Source	Crimescope: 000nm without filter at an oblique angle
	Powder Dusting	Black fingerprint powder: brush application

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WebCode	Development Methods	Method Details
HDGFHF	Alternate Light Source	Screening prior to processing, approximately 5 minutes. 1 print found on Item 3B with UV light. Photographed with UV light and yellow filter.
	Cyanoacrylate Fuming	Step 1 of processing. Tank time for fuming approximately 20 minutes. Left in open tank for approximately 10 minutes after fuming finished to let glue set. Moved pieces to work area and let sit for the rest of the day. No ridge detail could be seen after this process.
	Dye Stain	Step 2 of processing. Used Ardrox that is mixed in lab per ratio on Ardrox container. Under fume hood, coated pieces with Ardrox by submerging them in a glass pan. Then rinsed with water, taking about 5 minutes to process all 4 pieces. Let sit in fume hood until completely dry for several hours. Returned pieces to work station at end of day. Screened with the UV and 450 lights the next morning, no areas of ridge detail were present.
	Powder Dusting	Step 3 of processing. Used black fingerprint powder, approximately 2 minutes to powder all 4 pieces. Used ambient lighting to see the area of ridge detail on disc B. Proceeded to lift the print with tape and placed it on a print card. Process took approximately 2 minutes to lift the print and fill out the card.
HTUQ8M	Visual Examination	diffrent light sources and filters
	Cyanoacrylate Fuming	temp. 25 C, humidity 80%, time 20 min., natural and white light (Chamber Safefume CA30S)
	Basic Yellow	spray, 350-530 light, yellow filter
HUK84G	Visual Examination	Bright light. No ridge structure present. No collection method used
	Alternate Light Source	LabKam. Ridge structure present on the reverse side of labeled disc "B". Photography of ridge structure on the reverse side of labeled disc "B"
	Cyanoacrylate Fuming	Bright light. Positive control. No ridge structure present. No collection method used
	Alternate Light Source	LabKam. Ridge structure present on the reverse side of labeled disc "B". Photography of ridge structure on the reverse side of labeled disc "B"
	Dye Stain	RAY - Rhodamine, Ardrox, and Basic Yellow 40. Apply to surface, rinse with water, and let dry. Positive control under a Polilight. No ridge structure present without a Polilight. No collection method used
	Alternate Light Source	Polilight at 450 nm with orange goggles for the dye stain RAY. Positive control. Ridge structure present on the reverse side of labeled disc "B". Digital photography of ridge structure on the reverse side of labeled disc "B"
HUPUWA	Visual Examination	No visible fingerprints, trace evidence, or blood observed.
	Powder Dusting	Black powder

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WebCode	Development Methods	Method Details
HVD6BN	Alternate Light Source	Visual examination and 505nm and UV wavelengths. Print observed at this step with 505nm wavelength
	Cyanoacrylate Fuming	Fumed for 9 minutes in fuming chamber.
	Dye Stain	Sprayed with Rhodamine 6G dye stain then rinsed with destain. Disks viewed with 505nm wavelength.
HVKFJ9	Cyanoacrylate Fuming	All four pieces super glued in tank with standard apx. 40 mins. Control made with polymerization standard.
	Powder Dusting	After super gluing, pieces were dusted with black powder. Ridge detail noted on Item B. Was lifted with tape and secured to lift card.
J2NY3J	Visual Examination	06.10.19 Visual exam under white light and magnification; no prints observed
	Cyanoacrylate Fuming	06.10.19 CA fuming in the CYVAC vacuum chamber, control print developed; no prints observed
	Powder Dusting	06.10.19 Black powder application, print found on disk B
	Dye Stain	06.12.19 RAY batch 698
	Alternate Light Source	06.12.19 polilight flare 2, 450nm, orange filter, print found on disk B
J6Z9BB	Cyanoacrylate Fuming	80% rel. Humidity, 127°C heating plate, ca. 10 minutes fuming
JB8U3E	Visual Examination	Photograph as packaged. Then during visual examination (-)results.
	Powder Dusting	(+)results.
	Visual Examination	Then during visual examination (+)results.
JCF28R	Visual Examination	
	Alternate Light Source	(575 nm)
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	Ardrox (415 nm)
JDWECA	Visual Examination	TracER Laser
	Cyanoacrylate Fuming	
	Dye Stain	Rhodamine 6G
	Powder Dusting	Black
JDXV92	Cyanoacrylate Fuming	
	Dye Stain	both Basic Yellow 40 and Rhodamine 6 G were used
	Alternate Light Source	Polilight

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WebCode	Development Methods	Method Details
JEM82F	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	+RUVIS
	Dye Stain	RAM
JHRBU9	Visual Examination	
	Cyanoacrylate Fuming	Superglue fuming. Cyanoacrylate Fuming Chamber. Model: Mystaire CA-6000. Processing time 10 min at 70% humidity
	Powder Dusting	Bichromatic powder dusting
JLPWH6	Visual Examination	Four (4) thin, metal discs, 1 1/2" in diameter were examined. Metal is matte and not shiny. Each metal disc is labeled with a letter in black marker ("A," "B," "c," and "D") on one side. Side opposite of label is intended for processing. No FRD observed on discs using white/ambient light.
	Alternate Light Source	No FRD observed on discs with Crimescope between 350-495 nm wavelength with orange and yellow filters.
	Cyanoacrylate Fuming	All four discs placed in CA-6000 with 65% humidity for approximately 30 minutes.
	Visual Examination	No FRD observed with white/ambient light on any disc.
	Alternate Light Source	FRD is observed on disc "B," only, using Crimescope at all wavelengths between 350-495 nm wavelengths with an orange filter. FRD not observed on discs "A," "C," or "D" with Crimescope at any wavelength of light.
	Dye Stain	Disc "B" sprayed with RAM and set to dry.
	Visual Examination	Negligible FRD observed on disc "B" with white/ambient light.
	Alternate Light Source	FRD, suitable for capture, observed on disc "B" with Crimescope at all wavelengths between 350-495 nm wavelengths with an orange filter.
JU2PF2	Visual Examination	Examined all 4 metal discs for any visible prints.
	Cyanoacrylate Fuming	Placed all 4 metal discs in fuming chamber and let it cycle.
	Dye Stain	Applied R6G and Basic Yellow 40 (separate applications)
	Alternate Light Source	Viewed under various wavelengths of light with Polilight using orange filter. Examined each disc with ALS and filter after each separate application of dye stain.
K4HWRV	Cyanoacrylate Fuming	MVC 3000 Chamber. Glue temp. 120 Celsius. 80 percent humidity. 11 minutes glue time. Lot#201806011
	Dye Stain	MBD Dye Stain with a squirt bottle. Lot#062619-01
	Powder Dusting	Standard black powder. Lot#201804187

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WebCode	Development Methods	Method Details
K4KJ7N	Visual Examination	I looked at all the metal discs and was not able to see any latent prints.
	Cyanoacrylate Fuming	I placed the discs inside a cyanoacrylate fuming chamber for development. Once the process was complete, no visible latent print was visible.
	Dye Stain	After I processed the discs with cyanoacrylate, I processed same with Rhodamine dye stain. Once the dye stain was dry, I placed the discs under a crime scope and looked at same using 515nm and the latent print appeared.
K6DFTV	Visual Examination	Before enhancement : Incident and field lightning with visible light (crimelite 2 and crimescope), raking light (crimelite 2), UV (crimelite 2 365nm and labino 320nm), violet light with yellow filter (crimelite 8x4)
	Cyanoacrylate Fuming	Lumicyano (0,84g - 118°C - 77% humidity - 20')in a Foster&Freeman MVC cabinet visual examination with: blue light and yellow filter filter (crimelite 2), UV (labino 320nm), visible light (crimelite 2)
	Dye Stain	Rhodamine 6G: visual examination with blue/green light and orange filter (crimelite 2 and crimelite 8x4)
KE6P6D	Cyanoacrylate Fuming	CAE-40 min cycle
	Dye Stain	Methanol based Rhodamine 6G, water rinse with ALS, 515 NM lighting with an orange filter
	Powder Dusting	Black powder, photo, lift
KEKYA8	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	Basic Yellow 40
KQKHZE	Visual Examination	no ridge structure, not collected, examined with a magnifier and bright light source
	Alternate Light Source	examined using LabKam, ridge structure of value on item 3B-documented via examination quality digital photograph, no ridge structure on items 3A, 3C, and 3D
	Cyanoacrylate Fuming	positive control, items placed in cyanoacrylate fuming chamber with cyanoacrylate and deionized water, no ridge structure, not collected
	Alternate Light Source	examined using LabKam, ridge structure of value on item 3B-documented via examination quality digital photograph, no ridge structure on items 3A, 3C, and 3D
	Dye Stain	positive control, RAY (Rhodamine 6G, Ardrox, and Basic yellow) dye stain used, no ridge structure, not collected
	Alternate Light Source	examined using polilight at 450nm and orange filter, ridge structure of value on item 3B-documented via examination quality digital photograph, no ridge structure on items 3A, 3C, or 3D

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WebCode	Development Methods	Method Details
KXCZ7B	Visual Examination	No detail observed.
	Powder Dusting	Processed all 4 metal discs with black powder. A single latent print was developed on disc B.
KZK7RC	Visual Examination	AT 9:07 AM WHILE USING PROTECTIVE GLOVES, THE 4 PIECES OF UNTREATED METAL DISC (LABELED A,B,C & D) WERE WERE VISUALLY EXAMINED CAREFULLY ON THE REVERSE LABELED SIDE UNDER MAGNIFIED LIGHTING TO DETECT ANY LATENT FINGERPRINTS AND PHOTOGRAPHED ON BOTH SIDES BEFORE PROCESSING IT.
	Cyanoacrylate Fuming	AT 9:15 AM THE UNTREATED METAL ALONG WITH A CONTROL SAMPLE WAS PROCESSED NEXT USING CYANOACRYLATE FUMING (LOT#201903151, EXP DATE:04-2020) FOR 15 MINUTES IN ATTEMPT TO ENHANCE ANY LATENT FINGERPRINTS.
	Visual Examination	AT 9:35 AM THE UNTREATED METAL WAS VISUALLY EXAMINED CAREFULLY AGAIN FOR DEVELOPMENT OF ANY NEW FINGERPRINTS UNDER MAGNIFIED LIGHTING.
	Powder Dusting	AT 9:40 AM THE UNTREATED METAL WAS PROCESSED NEXT USING A BLACK FINGERPRINT POWDER (LOT#"201607096 EXP DATE: 12-2026) TO RECOVER, ENHANCE AND TO LIFT OR SUBMIT ANY LATENT FINGERPRINTS.
	Visual Examination	AT 9:50 AM THE UNTREATED METAL WAS VISUALLY EXAMINED CAREFULLY AGAIN FOR DEVELOPMENT OF ANY NEW FINGERPRINTS UNDER MAGNIFIED LIGHTING. THE RESULTS WAS "POSITIVE" FOR A PRINT ON 3B. THE LATENT FINGERPRINT EXAMINATION WAS FINISHED AT 10:00 AM.
L2UKQ6	Visual Examination	Item was visually examined.
	Cyanoacrylate Fuming	Item placed in CA chamber; CA allowed to heat up and fume item.
	Powder Dusting	Item processed with black powder & zephyr brush.
	Dye Stain	MBD dye stain washed over item; item allowed to air dry.
	Alternate Light Source	ALS used to see any prints developed with MBD dye stain.
L83VQC	Visual Examination	
	Alternate Light Source	Inherent Luminescence Exam. One (1) latent print detected at 450nm on disc "B".
	Cyanoacrylate Fuming	Vacuum.
	Dye Stain	Rhodamine 6G and fluorescence exam with ALS (PL505 @ 505nm) after treatment.
	Powder Dusting	Standard black. Latent enhanced.
LFFDFH	Visual Examination	ambient and green light (Tracer laser) were used
	lumicyano	fumed in CApture-BT chamber for 17 minutes

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WebCode	Development Methods	Method Details
LG8TQ9	Cyanoacrylate Fuming	misonix CA-6000 fuming cabinet, one preconfigured cycle
LJAX29	Visual Examination	Utilized white light. Approximately 5 minutes.
	Lumicyano/ALS	Purchased chemical. AirScience Safefume chamber with a humidifier and hotplate. 80% humidity and 25 min fume time. Followed by visual analysis with white light and the ALS (UV, 475nm with orange goggles and 520nm with red goggles). Observed ridge detail under white light and UV on disk B.
LM96M7	Cyanoacrylate Fuming	Cyac under vacuum then + Rhodamine 6G saturate and dry, Batch # NY02222019, visualize with laser (532 nm), test print +
LMFVTA	Visual Examination	Oblique light.
	Alternate Light Source	Used Crimescope with wavelengths 455-515nm.
	Cyanoacrylate Fuming	Used Cyanosafe fuming chamber and fumed for 20 minutes.
	Powder Dusting	Applied black powder with brush.
LPGG68	Alternate Light Source	forensic light source wavelenght 420-470nm and orange filter we found mark - disc B
	Cyanoacrylate Fuming	mark on disc B
	basic yellow 40	mark on disc B
LPZ43P	Visual Examination	PoliLight PL500
	Cyanoacrylate Fuming	RH 80%, 20 min
	Dye Stain	Basic Yellow 40
LWLH2A	Visual Examination	Use of white light and magnifier
	Cyanoacrylate Fuming	Placed item in chamber with heat, humidity, and fumed for 15 minutes
	Powder Dusting	Use of black powder with application by brush
LZKZY2	Visual Examination	
	Cyanoacrylate Fuming	
	Dye Stain	Basic Yellow 40
	Alternate Light Source	445 nm

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WebCode	Development Methods	Method Details
M27L7C	Visual Examination	With visual day light and clear led light (Crime-lite white light 400-700nm). Finding in sample B and that photographed. No other findings.
	Cyanoacrylate Fuming	Using MVC3000 Foster+Freeman fuming cabinet. 12 drops of Foster+Freeman Cyanobloom cyanoacrylate glue, distilled water. Humidity 80%,15 minutes for the water to vaporise. After that letting glue warm up 15 minutes in 120 degrees(C). After that print was clearly visible. Photogaphed.
	Wet Powder Suspension	Black WetPowder. Finding was more clear. Photogaphed.
M3LFP4	Powder Dusting	
M6B4CK	Visual Examination	Visual examination of metal disks using ambient and oblique lighting. No ridge detail observed.
	Alternate Light Source	Visual examination of metal disks using alternate light source with UV and 505nm wavelengths and clear and orange goggles. Ridge detail observed on disk "B" and labeled MPL2. Photos taken.
	Cyanoacrylate Fuming	Fumed metal disks with cyanoacrylate in fuming chamber for 9 minutes. Removed when complete.
	Visual Examination	Visually examined metal disks post cyanoacrylate fuming - No ridge detail observed.
	Powder Dusting	Dusted metal disks with black fingerprint powder. Same ridge detail observed on disk "B" labeled MLP2. Re-photographed post dusting.
M7KUB9	Visual Examination	Examined for any patent prints and found none.
	Cyanoacrylate Fuming	I used a quality control on glass inside the super glue fuming tank while processing the metal roofing discs. I placed approximately a quarter size amount of superglue in an aluminum dish, hot water in a beaker for humidity, and fumed the discs for approximately 30 minutes
	Powder Dusting	I used black powder to process the metal roofing discs after Cyanoacrylate Fuming and located a print on metal roofing disc "B".
MCQ3K6	Forensic lights	The evidence is checked using "LUMATEC400" forensic ligth with all spectrum. 25° C room temperature.
	Cyanoacrylate Fuming	Vaporization of cyanoacrylate in fumming chamber for about 9 minutes. 127° C temperatura. 71% humidity.
	Forensic lights	The evidence is checked again using "LUMATEC400" forensic ligth with all spectrum. 25° C room temperature.
	Gentian violet	The evidence is sumerged during a few second in a solution of gentian violet and after that procedure the evidence is cleaning using wáter.
	Forensic lights	The evidence is checked using "LUMATEC400" forensic ligth with all spectrum. 25° C room temperature.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
MEWXG8	Visual Examination	Pre processing photos - visual examination - RUVIS - ALS - Friction ridges observed on Item #3 labeled B - photographed time of photo 10:27 AM - Friction ridge impression labeled 3BL1.
	Powder Dusting	Black powder - Impression 3BL1 developed, photographed - Lifted secured as Item # HFIU1. Time of lift 1145A - post processing photos.
MLD2BA	Cyanoacrylate Fuming	Fumed for 10 minutes
	Powder Dusting	
MPCEWE	Visual Examination	Using white light 24/6/2019 at 8 AM
	Cyanoacrylate Fuming	8:30 AM 120 c CNA Plate Temp and Humidity is 80 Rh White Light examination
	Dye Stain	1- Basic yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 Am and examined by using white light. 3- Sudan black at 12:30 PM and examined by white light
	Powder Dusting	1:30 Pm And examined by white light
MQPE79	Visual Examination	Visual examination of Items 3A-3D was performed prior to any chemical processing and after each chemical process applied to each Item 3A-3D
	Cyanoacrylate Fuming	Cyanoacrylate (CA) fuming - Misonix (CA) chamber and cyanoacrylate liquid. Items 3A-3D and a test print on a glass slide were placed in the CA chamber for chemical processing. CA chamber is allowed to humidify to 80%, heat and fume CA for approximately 13 minutes, and purged CA fumes from chamber (pre-programmed cycles).
	Dye Stain	Rhodamine 6G (R6G) - fluorescent dye stain after CA fuming. R6G liquid was applied to the blank side of metal roofing discs Item 3A-3D and allowed to dry.
	Alternate Light Source	Items 3A-3D were examined under TraCer Laser for any visible fluorescent friction ridge detail
	RUVIS	Used in an attempt to try to get a better photograph of L2 - usually used after CA fuming.
MR6RU6	Visual Examination	White light and ALS
	Cyanoacrylate Fuming	
	Rhodamine 6G	
	Powder Dusting	Black powder

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
MV3DKM	Visual Examination	under white light and magnification, examined under fluorescent light
	Cyanoacrylate Fuming	CyanoSafe recirculation chamber for 20 minutes, wait 1 hour, examined under fluorescent light
	Dye Stain	RAY, batch 698, dip for 30 seconds examined with Crime Lite ML2 (420nm- 470nm filter)- orange filter
	Powder Dusting	Bi-Chromatic powder, examined under fluorescent light
MYHA87	Cyanoacrylate Fuming	Payton Cyvac M forensic Fingerprint Vacuum Machine, time: 40 min, chamber 37 celcius, hot bar heater 82 celcius. Fingerprint powder (swedish shoot mix black)
MYJWUC	Cyanoacrylate Fuming	Lumicyano (directly fluorescent cyanoacrylate)
MZVX8X	Visual Examination	The four metal roofing discs were examined using oblique lighting. No visible prints were observed.
	Cyanoacrylate Fuming	The four metal roofing discs were each placed in a fuming chamber and exposed to cyanoacrylate fumes for approximately 3 to 5 minutes.
	Powder Dusting	The items were then dusted with black dusting powder.
N3YNGY	Visual Examination	
	Alternate Light Source	UV & CS @ 515nm
	Cyanoacrylate Fuming	
	Dye Stain	RAM
	Powder Dusting	Black Powder
NAZ2EG	Cyanoacrylate Fuming	Items were placed into fuming chamber for approximately 10 minutes. Control performed (+).
	Powder Dusting	Following cyanoacrylate fuming, the items were processed using black powder.
NCMM6H	Visual Examination	Used overhead lighting and a flashlight to do a visual examination of the four metal roofing discs.
	Cyanoacrylate Fuming	The four discs were put into a cyanoacrylate fuming chamber (ArrowFlow) for 15 minutes of fume time at 80% humidity.
	Dye Stain	Sprayed discs with Rhodamine 6G
	Alternate Light Source	Then used the Coherent TracER Laser to check each disc
	Powder Dusting	I lightly dusted the discs with magnetic powder

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
NFLX2H	Visual Examination	Visual with flashlight
	Cyanoacrylate Fuming	Used Superglue chamber (ArrowFlow)
	Dye Stain	Rhodamine 6G rinse.
	Alternate Light Source	Then used ALS Rofin Polilight and Coherent TracER Laser.
	Powder Dusting	Conventional Powder and then Magnetic Powder
NJJMF6	Visual Examination	With different kinds of light sources. White, sidelong, UV and blue. Neg.
	Cyanoacrylate Fuming	Processing time 10 min, 2 g CNA, Rh 80%. Neg.
	Powder Dusting	Carbon powder. Pos
NKDBWE	Wet Powder Suspension	Softbalnding Art.nr 13410. Processing time: afew seconds
NZ9P3Z	Visual Examination	Using a flashlight
	Cyanoacrylate Fuming	Superglue chamber - 80% humidity for 15 minutes
	Dye Stain	MBD2 - used an orange filter and a forensic light source at 475nm to visualize and photograph.
P2NU8W	Visual Examination	Item was visually examined under magnification and white light. No prints were observed.
	Cyanoacrylate Fuming	4-5 drops of cyanoacrylate (CA) were placed into each of 3 CYVAC cups (12-15 drops total) and then placed on the heating element. A test print was added to the chamber. All items were placed in a way that will allow for circulation of the CA vapors and exposing the entire surface to them. The cycle ran for 12 minutes and then a 10 minute purge cycle. Items were allowed to sit undistrupted for 60 minutes. Items were visually examined under magnification and white light. No prints were observed.
	Dye Stain	Items were immersed in a tray of RAY solution and gently agitated for approximately 1 minute. Items were rinsed to remove excess RAY solution under tap water. Items were gently patted dry. Items were visually examined using a Crime Lite ML (460nm-510nm): orange filter). No prints were observed.
	Powder Dusting	Black powder was chosen to allow for contrast. The brush was dipped into the black powder in order to get a small amount of powder on the ends of the brush. Excess powder was shaken off the brush. The brush is lightly run over the item in a circular motion. Item was visually examined under magnification and white light.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
P63M4G	Visual Examination	The samples were viewed under white light with magnification with no prints observed.
	Cyanoacrylate Fuming	The samples were placed in the Crime Scene Unit CyanoSafe utilizing distilled water and 13 drops of cyanoacrylate for cyanoacrylate fuming and then allowed to set for one hour. A test print was utilized in the chamber with the items which yieled a positive result after processing. The samples were then viewed under white light with magnification with no prints observed.
	Dye Stain	The samples were placed in a tray with RAY dye stain for approximately one minute, rinsed gently, and patted dry. Once dry, the samples were viewed under blue light with an orange filter using the Crime Scene Unit Crime-lite ML with no prints observed.
	Powder Dusting	The samples were dusted with black powder and viewed under white light with magnification with one print observed on the sample "B".
P7BAMB	Visual Examination	White light -> Poly-light -> Reflected UV
	Cyanoacrylate Fuming	
	Dye Stain	BY40 -> C.V
PECPPH	Visual Examination	Visual examination under white light and magnification on July 6, 2019. No prints were observed.
	Cyanoacrylate Fuming	CyanoSafe (Crime Scene Unit) recirculation chamber on July 6, 2019. Test print positive. Fifteen drops of liquid Cyanoacrylate were added to three (3) foil cups (five (5) drops in each foil cup). Distilled water was added to the heating element. A test print was clipped in the upper right corner of the chamber. Item was hung with the clips. The door was locked and the process button was pushed. The cycle ran for 12 minutes and then did a 10 minute purge cycle. The item (A-D) were left to dry in the chamber for 60 minutes and then examined under white light and magnification. No prints were observed.
	Powder Dusting	Black powder was applied using a fiberglass brush on July 6, 2019. A print was observed on the disc labeled "B" under white light and magnification.
	Dye Stain	Florescent dye stain (RAY batch#700) was applied to the four (4) discs making sure that the entire surface of the four (4) discs were covered. The dye stain was rinsed off using water and the a KIMWIPE was used to blot off the excess water. The discs were then laid flat to dry. The discs were then examined using the CrimeLite ML (460-510 nm and an orange filter). No prints observed.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
PKA6WW	Visual Examination	
	Cyanoacrylate Fuming	Heat on glueplate: 120 degrees celcius, Humidity in cabinet: 80% rh, Process time: 10 min
	Dye Stain	Basic Yellow 40
	Alternate Light Source	420-470 nm
	"Microsil"	"Microsil" to lift the fingerprint.
PKEHH8	Visual Examination	No friction ridges present upon visual examination.
	Powder Dusting	Black powder applied by brush to all samples submitted.
	Visual Examination	Friction ridge impression visible on non-letter side of sample B. No friction ridge impressions visible on samples A, C and D.
PLNBA7	Visual Examination	Looked at item to see if there were any patent prints visible.
	Cyanoacrylate Fuming	Placed item in CAE chamber approximately 20 minutes to fume, added hot water for humidity.
	Powder Dusting	Powdered the item using black powder.
PM8UHJ	Visual Examination	Visual Examination completed on 6/11/19. Visual Examination under white light and magnification. No prints observed. Number of items confirmed.
	Cyanoacrylate Fuming	Processing completed on 6/11/19. Processed in the Cyanosafe Recirculation Chamber for 12 minutes and let sit for 60 minutes. Examined under white light and magnification. Control print was positive. No prints observed. Number of items confirmed.
	Dye Stain	Processing completed on 6/11/19. Item was treated with RAY (Batch# 696) and examined with the Crime Lite ML (460nm-510nm light) with an orange filter. Print was observed on disc "B". Number of items confirmed.
	Powder Dusting	Processing completed on 6/11/19. Black print powder was applied and discs were examined under white light and magnification. Print was observed on disc "B". Number of items confirmed.
PNB7YE	Cyanoacrylate Fuming	Item 3: Cyanoacrylate fuming: 80% RH, 15 minutes glue time (MVC3000)
PNFB93	Cyanoacrylate Fuming	The four pieces of silver duct tape was processed with Cyanoacrylate Fuming. There was a positive control taken with the items of evidence with accurate results.
	Powder Dusting	The metal roofing discs was processed/applied with black fingerprint powder with one print recovered from item (B).

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
PP7RR7	Visual Examination	Examend with white light, no print was visible. Examend with LED-flashlight, blue light (450 nm)/ yellow goggles and green light (505 nm)/ orange goggles. A print was visible with blue light and yellow goggles in section B.
	Cyanoacrylate Fuming	In a CNA-Chamber, fuming time 10 miutes and humidity 75 %.
	Visual Examination	Examend with white light, no print was visible.
	Dye Stain	Dipped in Basic Yellow 40 for a few Seconds, rinsed in cold running water and dryed in heat cabinet for 1 hour at 35 C.
	Alternate Light Source	Examend with LED-flashlight, blue light (450 nm)/ yellow goggles, no print was visible.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
PQD9KA	Visual Examination	White light examination of exhibit as received using ambient laboratory lighting and 'Tiablo' High Power LED Flashlight at varying angles.
	Alternate Light Source	Sequential initial High Intensity Light Source (HILS) examination carried out, following dark adaptation, using Green Crime Lite 490nm-560nm with 571nm viewing filter followed by Blue Crime Lite 420nm-470nm with 476nm viewing filter and UV Crime Lite 350nm- 380nm with 408nm viewing filter. Magnifying eyeglass used where required. QA adhered to and control test piece passed. A mark was identified on reverse side of metal disc labelled 'B' under blue light and photographed.
	Cyanoacrylate Fuming	Carried out as per CAST validated/internally verified procedure (Foster & Freeman MVC5000 Cabinet, Relative Humidity 80%, Glue time 13 minutes & 4g of superglue used). Following treatment, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass used where required. QA adhered to and control test piece passed.
	Dye Stain	Ethanol-Based BY40 dye used, carried out as per CAST validated/ internally verified procedure. BY40 dye applied to CD case with brush and left for ~15 seconds. Rinsed with water and left to dry. Examined when dry using blue Crime Lite 420-470nm with 476nm viewing filter, following dark adaptation, and magnifying eyeglass used where required. QA adhered to and control test piece passed. Mark identified under blue light in HILS examination was further enhanced with blue light after dye staining and photographed.
	Wet Powder Suspension	Carbon-based powder suspension used, carried out as per CAST validated/internally verified procedure. Both non-adhesive and adhesive sides treated. Pre-rinsed non-adhesive side with water. Powder Suspension applied to tape with soft squirrel hair brush and left for ~10-20 seconds. Powder Suspension rinsed off using gently running water until maximum contrast obtained and then allowed to dry. When dry, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass used where required. QA adhered to and control test piece passed. Titanium Dioxide (white) powder Suspension used, carried out as per CAST validated/internally verified procedure. Both non-adhesive and adhesive sides treated. Pre-rinsed non-adhesive side with water. Powder Suspension applied to tape with soft squirrel hair brush and left for ~10-20 seconds. Powder Suspension rinsed off using gently running water until maximum contrast obtained and then allowed to dry. When dry, examined using 'Tiablo' High Power LED Flashlight (white light) at varying angles and magnifying eyeglass used where required. QA adhered to and control test piece passed.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
PQJJGF	Visual Examination	03.06.2019 using white light - result negative.
	Alternate Light Source	03.06.2019 exam using fluorescent light source Green 532nm Laser revealed an impression on Disc B. The impression was labelled '19-5190 ITEM 3 A CL' and recorded using the same light source.
	Cyanoacrylate Fuming	03.06.2019 Superglue fuming process
	Dye Stain	04.06.2019 Basic Yellow 40 Dye - Stain process
	Alternate Light Source	06.06.2019 Fluorescent exam using Blue Crime-Lite 82S (foster+freeman), negative result. Impression labelled '19-5190 ITEM 3 A CL', disclosed on DISC B had deteriorated - quality poorer than initial laser exam.
PQZF7U	Visual Examination	Initial visual examination with white light and light source, blue and green light. A visible fingerprint in section B with the blue light source.
	photography	The fingerprint in section B was photographed
	Powder Dusting	The fingerprint in section B was much more visible with powder dusting.
Q6YUTA	Visual Examination	white light
	Alternate Light Source	polylight 450NM
	reflected UV	positive on item B
	Cyanoacrylate Fuming	
	Wet Powder Suspension	black positive on item B
	Dye Stain	B.Y.40
	Dye Stain	C.V.
QAPDMD	Visual Examination	Oblique light.
	Cyanoacrylate Fuming	MVC 1000 (Foster+Freeman) Autocycle Mode.
	Powder Dusting	Black Powder.
QDRDHW	Cyanoacrylate Fuming	Placed each metal circle into the fuming chamber and allowed to fume for 20 minutes.
QVWCG8	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
QXXM6U	Visual Examination	Item was viewed under a magnifying glass with light.
	Cyanoacrylate Fuming	Chamber set at 60% humidity max fume time 15 min, auto purge time 10 min.
	Dye Stain	Basic Yellow dye stain, allowed to dry for approximately 5 min.
	Alternate Light Source	Viewed with blue light and orange filtered goggles.
QYMXX9	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Alternate Light Source	
	Dye Stain	
	Alternate Light Source	
R37679	Visual Examination	NO USEFUL RIDGE DETAIL FOUND
	Cyanoacrylate Fuming	ITEMS TREATED DIRECT TO BY40
	Dye Stain	BY40 ETHANOL BASED. B LABELLED ON 3B.
R9YQ9A	Visual Examination	8:45am-10:30am for all exams.
	Alternate Light Source	Standard and control worked as expected.
	Cyanoacrylate Fuming	Standard and control worked as expected. Wand was used with fuming cartridge lot # 091109, kit 11, cartridge # FC38.
	Powder Dusting	Black powder
RA88YR	Visual Examination	Visual examination under white light and magnification on June 28, 2019. No prints were observed.
	Cyanoacrylate Fuming	CyanoSafe (Crime Scene Unit) recirculation chamber on June 28, 2019. Test print positive. No prints were observed.
	Dye Stain	RAY (batch #700) processing and examination using Foster + Freeman Crime Lite ML with a 460nm-510nm bandwidth filter and orange barrier on June 28, 2019. Prints were observed on disc B.
	Powder Dusting	Magnetic powder on July 3, 2019. Prints were observed on disc B.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
RGALXV	Visual Examination	Visual examination of Items was conducted.
	Cyanoacrylate Fuming	Item fumed using Air Science safe fume chamber for 60 minutes @ 75% humidity.(test print was placed on clear acetate and fumed along with the Items)
	Visual Examination	Visual examination of the Items after processing was conducted. Negative results. (Test print from acetate was positive)
	Dye Stain	Items were dyed using Rhodamine 6G.
	Alternate Light Source	Alternate light source used (530). Items were visually examined under the light source with negative results.
	Powder Dusting	Items were dusted with black powder with negative results.
RRPPUT	Cyanoacrylate Fuming	Before the apply of cyanocrylate, we detected a Ridge details using visual examination with alternate light source. Then we applied cyanocrylate fuming and revealed a Ridge detail. After cyanocrilate application, we used Ardrox dye with satisfactory results.
T9PV3M	Visual Examination	I visualized the round metal discs (the reverse side from label) as they were, and I also used oblique lighting, ALS, UV, and LASER. It took about 5 min.
	Cyanoacrylate Fuming	I superglued the round metal discs by putting them in the superglue chamber for about 10min. I looked at them under shortwave UV light.
	Dye Stain	I dye stained the round metal discs with Ardrox and let them dry for 5-10min. I looked at them under the UV light.
	Dye Stain	I dye stained the round metal discs with Rhodamine 6G and let them dry for 5-10min. I looked at them under the LASER.
	Powder Dusting	I powdered the round metal discs with carbon black powder.
TAJHFQ	Visual Examination	White ambient light. No print was detected.
	Cyanoacrylate Fuming	Processing time: 3,5 minutes. No print was detected.
	Dye Stain	Basic Yellow 40. No print was detected.
	Powder Dusting	Swedish soot mix black. A good quality print was detected in section B.
TCRN4D	Cyanoacrylate Fuming	first items developed in fuming chamber MVC3000 Mason Vactron (standard cycle - very poor results) then operation repeated in vacuum chamber VAC200 (poor results)
	Dye Stain	Ardrox (ready solution) then rinsed with tap water and after drying observed in light 430-515 nm through orange filter
THG7F4	Cyanoacrylate Fuming	CA method same as item 2
	Dye Stain	MBD-(methanol based dye stain) applied & allowed to dry. Item viewed w/ forensic light source at CSS setting.
	Powder Dusting	Black powder applied w/ fiberglass brush & item viewed.

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WebCode	Development Methods	Method Details
TKKWN4	Cyanoacrylate Fuming	
	Powder Dusting	
TXU83Y	Powder Dusting	Discs dusted with black powder and fiber finger brush.
U4W72A	Cyanoacrylate Fuming	In fuming chamber for approximately 10 minutes.
	Powder Dusting	Obtained 1 lift from Piece B.
U6JUBP	Visual Examination	No prints visible after visual examination in white light.
	Alternate Light Source	Blue and green fluorescent light. A fingerprint was observed on disc "B" with the blue light.
	Cyanoacrylate Fuming	The discs were processed with CNA for 8 minutes. The fingerprint on disc "B" was visible after the development.
	Dye Stain	The discs were stained with BY40 after CNA. The fingerprint on disc "B" was visible after the dye stain.
UDG6GY	Visual Examination	
	Cyanoacrylate Fuming	Superglue chamber and Superglue were used to process the evidence (approximate processing time was 30 min)
	Powder Dusting	Black powder was used to visualize latent print
UEBAY8	Polycyanoacrylate fuming	
UKDH6Z	Visual Examination	
	Alternate Light Source	Obelux Royal Blue. Visible print
	Cyanoacrylate Fuming	Cabinet: LabRum Klimat, time: 20 minutes, temperature: 125 celsius, humidity: 80%
UM2QU4	Visual Examination	NOTHING NOTED
	Powder Dusting	BLACK VOLCANIC POWDER. LATENT VISIBLE ON LETTER "B"
UNWD9R	Visual Examination	
	Cyanoacrylate Fuming	Heat on glueplate: 120 degrees celcius, Humidity in cabinet: 80% rh, Process time: 10 min
	Dye Stain	Basic Yellow 40
	Alternate Light Source	420-470 nm
UR3PC9	Visual Examination	Visual exam with magnification
	Cyanoacrylate Fuming	Processed in CA chamber at 80% humidity for 30 min
	Dye Stain	MBD dye stain used

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
URHD89	Visual Examination	
	Alternate Light Source	(415 nm)
	Cyanoacrylate Fuming	(120°C ± 5°, 75% Relative Humidity ± 15%)
	Dye Stain	Ardrox (350 nm)
UU4FCE	Visual Examination	White light and magnification.
	Cyanoacrylate Fuming	CyanoSafe processing tank, test print positive, 12 minute fuming cycle, left to sit for an hour after fuming to set.
	Dye Stain	Ray batch number 696. Spray with Ray, let sit for 30 seconds, rinsed, allowed to dry.
	Powder Dusting	Black Powder
UUL4F9	Visual Examination	Examination with Superlite Lumatec (UV and visible spectrum), Coherent laser 532 and 577 nm.
	Cyanoacrylate Fuming	Fuming of luminescent cyanoacrylate (Lumicyano, 80% RH and 120°C) in a fuming cabinet then examination in UV with a 325 nm Labino source.
	Dye Stain	Dying with basic yellow 40 dye then rinsed with water. Examination with blue light (Crimescope CS16-400 at 445 nm) and yellow filter.
UULCV2	Cyanoacrylate Fuming	Lumicyano. Black powder dusting
UWC6LW	Visual Examination	
	Alternate Light Source	Initial observation with ALS - Some Friction Ridge Detail (FRD) on disc B.
	Cyanoacrylate Fuming	
	Alternate Light Source	Observation with multiple wavelengths and respective filters. Limited indication of FRD on disc B.
	Dye Stain	Applied Rhodamine 6-G for 30 sec and rinsed with Methanol. Allowed to air dry.
	Alternate Light Source	Using Blue/Green wavelength and Orange filter observed latent on disc B.
	Powder Dusting	Applied black fingerprint powder and lifted print on disc B.
UXLWTT	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	20 minute fuming cycle and 5 minute purge
	Dye Stain	R.A.M.
	Powder Dusting	Used black powder

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
VDCLY9	Visual Examination	With no any enhancement (only eyes) and with white light (flashlight) at direct and oblique angle, all 4 discs were examined. Ridge structure was observed in disc that has B logo but not good for comparison even after photographing it by DCS-5 system.
	Alternate Light Source	With no any enhancement (Using Crime lite 82S Blue/Green and UV Light) all 4 discs were examined again. Ridge structure was observed in disc that has B logo but not good for comparison even after photographing it by DCS-5 system.
	Cyanoacrylate Fuming	Lumicyano Process. Operating Parameters: Temp. = 230°C, Relative Humidity = 80%, Time = 15 min, Amount= 2.5 g. Test print (Positive control during process was performed)
	Visual Examination	After cyanoacrylate fuming process (only eyes) and with white light (flashlight) at direct and oblique angle they were examined. Ridge structure was observed in disc that has B logo.
	Alternate Light Source	After physical enhancement (Using Crime-Lite 82S (UV) light), they were examined. Ridge structure was observed in disc that has B logo but not good for comparison even after photographing it by DCS-5 system.
	Powder Dusting	black powder. Ridge structure was observed in disc that has B logo and it was good for comparison and it was photographed using DCS-5 system.
	Lifting	Using White Gellifters. The fingerprint lifted and photographed using DCS-5 system.
VDYRLU	Alternate Light Source	LASER - Inherent luminescence, ridge detail visualized on disc B
	Cyanoacrylate Fuming	Cyanoacrylate Chamber Program #2 (Grams 2.5, Humidity 60%, RH Dwell 1 minute, CA Heat 250F, Fume 18 minutes, Purge 4 minutes), test print +
	Dye Stain	Rhodamine 6G applied, rinse with methanol, view with LASER, ridge detail visualized on disc B
VMZGW4	Cyanoacrylate Fuming	The discs (A, B, C and D) are fixed with cyanoacrylate vapors (cyanowand).
	Powder Dusting	Subsequently, it is applied to the discs, black oxide reagent for the development.
VUJD87	[No Methods Reported.]	1000 Viewed w/natural light. Processed w/cyanoacrylate ester in vacuum chamber. 1230 dye stained w/Rhodamin 6G (ELP09617). 1245 viewed w/forensic laser. 1 print developed on item B. Test +
VUZBCV	Visual Examination	TracER Laser with orange filter
	Cyanoacrylate Fuming	FF MVC5000
	Dye Stain	Rhodamine 6G, TracER Laser with orange filter
	Powder Dusting	black

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
VVVXNY	Visual Examination	
	Powder Dusting	Black powder
VWP9JV	Visual Examination	White light and fluorescence examination 350nm-650nm with appropriate edge filters
	Cyanoacrylate Fuming	processing in fuming cabinet for 12 minutes, heat superglue to about 120C and humidity 75%Rh, exam with white light and 450nm
	Basic Yellow 40	the solution was applied by spraying and the excess was rinsed with cold running tap water. Examination with 350-450nm
VZLRPZ	Powder Dusting	Processed disc with black powder. Print developed on disc B.
W86QW7	Visual Examination	Ambient, UV, Tracer
	Cyanoacrylate Fuming	Processing time approx. 10 minutes
	Dye Stain	Basic yellow
WCELJA	Visual Examination	
	Cyanoacrylate Fuming	
	Powder Dusting	Dual Use Black
WEMJB6	Visual Examination	Using White Light 24/6/2019 at 8 AM
	Cyanoacrylate Fuming	8:30 AM 120 C CNA Plate Temperature and Humidity is 80 Rh White Light examination
	Dye Stain	1- Basic Yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 AM and examined by using White light. 3- Sudan Black at 12:30 PM and examined by white light
	Powder Dusting	1:30 PM and examined by White Light
WLQ7Y6	Visual Examination	6-6-19 Visual examination under white light and magnification. No prints.
	Cyanoacrylate Fuming	6-11-19 Processing in the CyanoSafe. Test strip positive. Examined with white light and magnification. NO prints.
	Powder Dusting	6-11-19 Items 3A-D were powdered with black powder. Print developed on Disc B.
	Dye Stain	6-13-19 Items 3A-D were processed with RAY dye, batch 698, and then patted dry. Examined under polilight flare plus 2 450 blue light and orange filter. Print developed on disc B.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
WR7DF4	Visual Examination	
	Alternate Light Source	White (400-700 nm) and blue (430-470 nm) light.
	Cyanoacrylate Fuming	0,053 oz (1,5 gram) CNA-glue. 10 minutes development time. 80% humidity. 120 degrees celcius heating plate.
	Dye Stain	Basic Yellow 40, based on ethanol 96%.
	Alternate Light Source	Blue (430-470 nm) light.
WUZKXZ	Cyanoacrylate Fuming	Humidity approx. 80%. Temp approx. 75 degrees F. Fuming time ~1-2 minutes
	Dye Stain	Rhodamine 6G, methanol based. Viewed with LASER at 532nm with orange barrier
	Powder Dusting	Black powder
WVALJY	Cyanoacrylate Fuming	
	Dye Stain	R6G MeOH
	Laser	@532nm and 445nm with orange barrier
WVBDXU	Visual Examination	Laser and Crimelite. Curved filter
	Cyanoacrylate Fuming	Fuming chamber x 70 minutes. Crimelite
	Dye Stain	R6G and MeOH rinse. Laser and Poly light 505nm. Curved filter
	Powder Dusting	Black powder. Crimelite, Incandescent light, and Fluorescent light
WY9KWR	Visual Examination	Visual inspection
	Cyanoacrylate Fuming	Super glue (3 min)
	Dye Stain	RAM- fluorescent dye
	Alternate Light Source	Foster Freeman DCS-5; One print developed
WZL8CJ	Visual Examination	Crimelite white, UV
	Cyanoacrylate Fuming	Lumicyano: 0.087g powder + 2.2g glue. Fumigation chamber: Foster and Freeman MVC 3000
	Powder Dusting	black magnetic powder
XFALAP	Cyanoacrylate Fuming	
	Powder Dusting	
	BY40 solution	
XK83P6	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
XXG2TQ	Visual Examination	Used white light to examine.
	Cyanoacrylate Fuming	Exposed to CAE fumes in chamber at 60 percent humidity for approximately 10 minutes.
	Dye Stain	Sprayed with R6G MeOH and allowed to air dry before viewing under laser light at 532 nm with an orange barrier.
XYQNBJ	Cyanoacrylate Fuming	
	Dye Stain	MBD dye stain
Y2TMX3	Visual Examination	Item 3 was examined with white light and magnification. No prints were observed.
	Cyanoacrylate Fuming	Item 3 was processed in the Cyanosafe recirculation chamber (LP Unit). A control print was developed. No prints were observed.
	Dye Stain	Item 3 was treated with RAY batch #698. Item 2 was examined under magnification and Foster + Freeman Crime Lite ML2 with a 420nm-470nm bandwidth filter and orange barrier.
	Powder Dusting	Item 3 was processed with bi-chromatic powder. A print was observed on disc B.
Y339GW	Cyanoacrylate Fuming	
	7-P-methoxybenzlamino-4nitro benz-2-oxa-1-3-diazole (MBD)	
	Alternate Light Source	
Y3JXPV	Visual Examination	ambient light and flashlight
	Alternate Light Source	350-670nm with yellow, orange, and red filters
	Lumicyano	used a CA3000 Misonix Fuming chamber - fumed for 35 minutes
	Alternate Light Source	390-520nm using orange filter
	Dye Stain	Rhodamine 6g
	Alternate Light Source	455-515nm using orangefilter
	Powder Dusting	Black fingerprint powder
YEEKNY	Visual Examination	
	Alternate Light Source	
	Cyanoacrylate Fuming	
	Dye Stain	

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
YJMWN7	Visual Examination	No ridge detail observed.
	Cyanoacrylate Fuming	Processing Time: 0.50 hour; No ridge detail observed.
	Powder Dusting	Processing Time: 0.50 hour; Black Powder - Ridge detail preserved from Disc B: backside of metal type "coin B"
	Dye Stain	Processing Time: 0.50 hour; Dye Stain: MBD (4-(4-methoxybenzylamino)-7-nitrobenzofurazan). Viewed with forensic light source at 455nm using an orange barrier filter - No ridge detail observed.
YK7JMN	Cyanoacrylate Fuming	Cyanoacrylate fuming chamber, + Control, Humidity 70%, fuming time 10 minutes, Lot: UR18419, EXP: 10/2109, black powder
Z3GR2T	Visual Examination	Initial visual examination performed under white light, a CrimeScope CA-16-500 Alternate Light Source, and a TracER LASER.
	Cyanoacrylate Fuming	Items were fumed in a Misonix CA-6000 Fuming Chamber for 8 minutes and 75% humidity and viewed under white light.
	Dye Stain	A methanol based Rhodamine-6G dye stain was sprayed on the items and viewed under a TracER LASER at 532nm.
Z3V97U	Polycyano	Machine: Foster&Freeman MVC3000, serial number 3286. Service: 27.3.19. Humidity 80%, Temperature 230 degrees, moisturise time 12 minutes, gluetime 20 minutes.
Z4B4R8	Visual Examination	LED white light and magnification
	Cyanoacrylate Fuming	LED white light and magnification
	Dye Stain	RAY Batch 696. Polilight 2 (450nm with an orange filter)
	Powder Dusting	Black Powder. LED white light and magnification
Z94CTT	Visual Examination	Oblique lighting, ALS, RUVIS
	Cyanoacrylate Fuming	
	Visual Examination	ALS, RUVIS
	Dye Stain	Rhodamine 6G
	Visual Examination	ALS
ZA2ZGD	Cyanoacrylate Fuming	
ZAWK2R	Visual Examination	Disclosing of a fingerprint. The light sources (UV and visible) at the labeled wavelength 350-650 nm and white.The fingerprint is visible the best at the labeled wavelength 350 nm and 415 nm.
	Cyanoacrylate Fuming	No improvement in fingerprint quality after use Cyanokcrylate Fuming. The fingerprint is almost not visible.
	Dye Stain	No improvement in fingerprint quality after use Basic Yellow 40. The fingerprint is visible the best in the light source 415 nm with yellow goggles but no better than visual examination.

TABLE 2 - Item 3

WebCode	Development Methods	Method Details
ZEVW74	Visual Examination	Natural light, white light (angle light), optical instruments.
	Alternate Light Source	Polilight PL 500, barrier filters, optical instruments.
	Cyanoacrylate Fuming	Processing time: 10 min, humidity: 80%.
	Visual Examination	Natural light, white light (angle light), optical instruments.
	Dye Stain	Basic Yellow 40.
	Alternate Light Source	Polilight PL 500 (350-505 nm light), optical instruments.
ZJL7F3	Visual Examination	Using white light 24/6/2019 at 8 am
	Cyanoacrylate Fuming	8:30 AM 120 c CNA plate temp and humidity is 80 Rh White Light examination
	Dye Stain	1- Basic yellow 40 at 10:30 AM and examined by using blue light. 2- Crystal Violet at 11:30 Am and examined by using white light. 3- Sudan black at 12:30 PM and examined by white light
	Powder Dusting	1:30 PM. And examined by white light
ZLAKXK	Cyanoacrylate Fuming	Cyanoacrylate cabin with 75% Humidity amd total process duration 20 minutes approximately.
	Dye Stain	The evidence has been sprayed with Ardrox.
ZMMCTM	Visual Examination	A bright white light was utilized.
	Cyanoacrylate Fuming	Performance check conducted CAF: 6/10/19 - passed. Fume cycle approx. 15 min. at 60% humidity.
	Dye Stain	Basic Yellow 40 - Performance check conducted BY40: 6/14/19- passed. Rinse method used for application
	Alternate Light Source	Polilight 550XL used for viewing at several different wavelengths.
ZQ3Y7R	Visual Examination	07-19-19/1340 visual examination for latent prints
	Cyanoacrylate Fuming	07-19-19/1350-1530 glue fume
	Powder Dusting	07-19-19/1530 black powder dusted items A-D

Response Summary

Participants: 270

Methods Utilized

Alternate Light Source	116	Physical Developer	0
Cyanoacrylate Fuming	236	Powder Dusting	133
DFO	0	Visual Examination	224
Dye Stain	156	Wet Powder Suspension	7
Ninhydrin	0	1,2-Indanedione	0

**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 1

WebCode	Preservation Methods	Method Details
239ENG	Photography	Latent photograph - 07/11/2019 - 1131 hours (item #1LP-1a). Latent photograph - 07/12/2019 - 1120 hours (item #1LP-1b). Latent photograph - 07/16/2019 - 1038 hours (item #1LP-1c).
26ZBDB	Photography	
2BAMCW	Scanning	On 7/12/2019 at approximately 10:25am, Item 1 in it's entirely was scanned and copied.
2KCPU9	Photography	
2T6MCM	Scanning	scanned at 1200 and saved as a tif
2UF84Q	No prints detected	No prints detected
2W77JA	Plastic Sealed	Sealed for 17 days
2ZPQJP	Development only	Item was placed in protective packaging as received.
3DU74Y	Photography	07/01/2019: Nikon D300 camera on copy stand, RAW format, Aperture priority, 90 degrees to item, Angled lighting. Photographs captured - Overall of front side and back side, Section D on front side with scale present, and area in section D on front side with scale present. Photographs captured uploaded into Digital TraQ. Photograph of area in section D on front with scale present was enhanced in Photoshop. Enhancement was calibrated 1:1 in TraQ and printed
3KCRYN	Photography	All developed prints were photographed
3T3U2E	Photography	I photographed a developed latent impression after processing the DFO. I visualized it with the LASER and orange filter.
3ZK69N	Photography	
473XWT	Photography	Images saved in JPG and RAW at 1000 dpi, and transferred to DVD.
49ZML2	Photography	DSC-4 system used for positive latent print on DFO including control sample.
	Photography	DSC-4 system used for control sample only on NIN.
	Photography	DSC-4 system used for control sample only on PD.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
49ZP9K	NONE	No ridge detail developed.
4AM3FN	Photography	Nikon D7000, Bright Beam laser (532nm/orange filter)
4APPW3	Photography	A photograph of the developed print was captured using a Nikon D3400 camera.
4HWDLU	Photography	Foster Freeman-DCS-5 (Mark 8)
4KB2JT	None	Potential development in quadrant D; however, it was a small area with faint, partial and broken ridge detail (no value)
4RRAUQ	Photography	Orange filter
4UV3L4	Photography	Nikon D5300
63PT3P	Photography	Photographed developed print in quadrant "D" using DCS-4 with ALS at 480 nm and an orange/yellow filter. No other prints developed.
6BZADW	Scanning	ninhydrin-1 scanned image of section D, see metadata for scanner settings
6FLQNF	Photography	photography with the Orange filter and forensic light.
6TVK4Y	Photography	Photographed under Laser @ 532nm with orange barrier filter. Also took an overall photograph with tungsten light.
6WW8YN	Photography	Item 1 was photographed prior to processing, and after each processing method.
6XPGTP	Photography	06/04/2019 DFO photographed with a scale and using green laser 532 nm with an orange filter. Ninhydrin photographed with a scale.
6XU4EQ	Photography	Incandescent lighting
6YQH7P	Photography	Using the DCS, I took two photographs of the ridge detail with a scale.
6ZW4FN	Photography	Item placed into Locker #24 overnight for prints to develop. On 06/28/2019, item was "In-analysis" and documented using photography. Overall, midrange, and extreme close up of print was photographed. Print was then enhanced in Photoshop and entered into the Traq system
76LDCL	Photography	used laser/532nm/orange filter

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
7FLBNN	Photography	
7LUTPF	See methodology	No latent prints developed
7R2VGX	Photography	(Green Filter)
7XMT6K	No Latent Prints Developed	
839ARU	Photography	light source
83E4PN	Scanning	EPSON Perfection Scanner. One scan taken at or greater than 1000 DPI
8B6ZGC	Scanning	Adobe Photoshop
8DXW76	Photography	(Green Filter)
8DZ8WM	Photography	DCS used with white light
8LA4NU	Photography	Digital camera; 505 nm; orange filter; RAW/TIFF format
8REWUJ	[No Methods Reported.]	None - not required.
8WRRJT	Photography	Item 1 was viewed and photographed under 515 nm light source with orange filter and producing a strong fluorescence.
8WT74L	Photography	
8X4RTM	Photography	Digital photographs of item and developed areas. Enhancement of original photograph through Photoshop using existing Standard Operating Procedures.
983NTP	Photography	Photographed with measurement.
9DVGFQ	Photography	green light (490nm), orange filter (550nm)
9HQWWR	Photography	Digital Photography using a scale and Macro lens.
9JXVUZ	Photography	Captured with a camera using direct balance laser lighting with an orange filter; images captured in TIFf format with accompanying scale/photo tag containing case number, item number, date of capture, and other required information.
9U36XX	Photography	Foster + Freeman DCS-5

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
ABJ7U8	Photography	
AG7WEG	Photography	Nikon D4S
ALGAVF	No print found, no preservation necessary	
AN7KQE	Photography	Photography-used Foster Freeman Mark 8, 529 nm (blue light) on Indanedione process
APZ6Y6	Photography	blue-green light and orange filter
AR8J8Y	Photography	
B3LGPT	Photography	DCS-5 system
B3LJCC	Photography	
B6N4WK	Photography	ALS at 495 nm, orange filter
B9QTL7	Photography Safe packaging and storage	A photograph of the fingermark was conducted (DCS 4 system) after Indanedione + zinc chloride treatment
BQNHTF	None	No prints developed
BWHUX8	Scanning	Adobe Photoshop
C2A6HB	Photography	
C47AWB	Photography	
C4BP9B	Photography	
C7X9CU	Photography	RAW, ISO 100, F22, Laser, scale
C88VKD	Scanning	Epson V800 at 1200 ppi
CA4KGB	Photography	A print observed in quadrant 1D was photographed with a digital camera after being processed with DFO. An orange 23A filter was used on the camera and the images were taken at 505nm with an alternate light source (Rofin Polilight PL500).
CFNP63	Photography	photography in the dark under cyan light 500nm and orange filter

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
CJM3TU	Photography	DFO; Ninhydrin
CPAVWG	Photography	
CQ9GTY	Scanning	One image was taken with LP-Scanner 07 using direct lighting for item 1D, ninhydrin print.
CYXQXH	Photography	Foster&Freeman Green Light (480-560nm). Red filter. Canon EOS 5D MarkII + 100mm L2.8 Macro
D3FN36	[No Methods Reported.]	ridge detail developed on back - top portion of page
D62QQP	Photography	The impression was preserved by using a Digital Capturing System (DCS-5) made by Foster and Freeman. To capture DFO developed impression a green laser (Tracer) was used. To capture NIN images a green lift was used.
D8RRWD	Photography	
DHMMQG	Photography	Preservation- Photography of latent print developed. Sealed in envelope.
DKVPND	Photography Scanning	
DWQ4LP	Scanning	Scanned in as TIF file at 1000 PPI. Used photoshop for enhancement. Friction ridges observed in quadrant "D". Not 100% confident in pattern type due to poor quality of print.
E6GQ9E	Photography	
EEK47U	Photography	
EMV3Z6	Scanning	
EP3KY2	Photography	I took one digital photograph of a latent impression at the DFO/Laser stage. I saved that digital photograph onto a compact disc.
EWNDCL	Photography	Green light for DFO and white light for Ninhydrin
EZNP9L	Photography	Green light for DFO and white light for Ninhydrin
F3MZGC	Photography	
F9UVF9	[No Methods Reported.]	none required

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
FG83XX	Photography	
FP28QY	Photography	Digitally photographed and uploaded
G4XLN8	Photography	
G73WD2	Photography	
GBDAJ9	Photography	We took a photo of the print in digital format and saved it. Then the photo is treated in order to clearly identify the print.
GLBBVD	Photography	
GMRXDD	Photography	Photographed developed print and printed 1:1
GWWQ38	Scanning	One scan taken at 1000 ppi.
H6N8WN	Photography	camera Nikon D800e lens AF Nikkor 105 mm with evidence scales.After every method the trace was protected by photography.
HAJH4M	Photography	Photographs of the area were taken with and without a scale using a department issued digital camera and a photo card. The letter was heat-sealed in clear plastic and repackaged in the original evidence packaging. The photo card was packaged in an evidence bag.
HDF948	Scanning	Ninhydrin (Petroleum Ether) Working Solution - Epson Scan software; Epson Perfection V800; Captured at 1,200 dpi; Saved as TIF; Viewed using Adobe Photoshop CC; One (1) image captured
HDGFHF	Photography	Used a Nikon D850 camera. Laser to see the print and an orange laser filter for the camera. 5 photos taken of Area D1.
HUK84G	None	No collection method used
HVD6BN	Photography	Ridge detail was determined not enough and not photographed. If ridge detail would have been sufficient-photos would have been taken.
J6Z9BB	Photography	Excitation wavelength 490-560 nm. Observation wavelength 550-620 nm
JB8U3E	Photography	No latent prints found; photograph taken to show (-)results.
JCF28R	Photography	

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
JDWECA	Photography	
JLPWH6	[No Methods Reported.]	Did not capture negligible FRD, as it is of no value.
JU2PF2	Photography	Digital photography with scale of latent print mark in sector D.
K4HWRV	none	Slight color reaction did occur in area D.
K4KJ7N	Photography	Once the print was discovered, I placed a scale next to the print and photographed same with my Nikon D5600 camera. Latent print appeared in sector "D"
K6DFTV	Photography Scanning	Photography of the mark after every step of examination after ninhydrin to fix the mark in time
KE6P6D	Photography	Initial photography, Photography after DFO, Photography after NIN
KEKYA8	Photography	
KQKHZE	[No Methods Reported.]	no ridge structure collected
KZK7RC	NONE TO PRESERVE	THE RESULTS OF THE FINGERPRINT EXAMINATION ON THE TYPED NOTE WAS NEGATIVE.
L2UKQ6	[No Methods Reported.]	This item was negative for latent prints; no method was used to preserve latent prints.
L83VQC	Photography	
LFFDFH	Photography	Foster & Freeman DCS-4 used to record positive development
LG8TQ9	Photography	Post processing photography. Nikon D2x, oblique lighting, both side of item 1, close up of ares A, B, C, D
LJAX29	Photography	Photographed after Ninhydrin with oblique lighting and the ALS (520nm)
LM96M7	Lifting	Nikon D800 + orange filter and macro lens
LMFVTA	[No Methods Reported.]	No prints were observed or collected.
LPGG68	Photography	
LPZ43P	Photography	Nikon D750, Nikkor 60 mm Macro

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
LWLH2A	Photography	Use of DCS-4 to capture images on third day post processing (in case of any fading). Checked item again on 6/26/2019 with no additional development.
LZKZY2	Photography	
M27L7C	Photography	Photographed with right filter and light source.
M6B4CK	Photography	Photos taken of ridge detail located in section D using ALS with 505nm wavelength, orange goggles and orange camera filter. Ridge detail not suitable for comparison - unable to determine pattern type.
M7KUB9	Photography	I took an overall photo and close-up photo with a scale of the print from box "D", using the DCS and white light.
MCQ3K6	Photography	By using forensic lights after DFO (490 Nm) and Ninhydrin (White light) treatment.
MLD2BA	Photography	Scaled photographs with macro lens
MPCEWE	Photography	Green light for DFO and white light for Ninhydrin
MQPE79	Photography	Photographed L3 (after IND with laser light) - section D with scale
MR6RU6	Photography	
MYJWUC	Photography	
MZVX8X	Photography	Photographs were taken using macro lens.
NAZ2EG	Scanning	Area where print was observed was scanned with scale, the image was then enhanced and printed 1:1.
NCMM6H	Photography	Photographed the piece of paper (front and back) prior to processing. The latent print did not meet our suitability standards so it was not photographed for comparison purposes. There was insufficient ridge detail.
NFLX2H	Photography	Photographed for location. Latent print did not meet our suitability standards so not photographed for comparison purposes. Insufficient Ridge Detail.
NJJMF6	Photography	
NZ9P3Z	Photography	Canon EOS Rebel T6i Camera

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
P2NU8W	[No Methods Reported.]	No prints were observed so no additional preservation was needed.
P7BAMB	Photography	Wave length 520nm after using 1,2-Indanedione
PKEHH8	Photography	Area of apparent positive processing was photographed prior to subsequent VMD processing.
PLNBA7	Photography	Photographed print using an ALS using DCS system
PNB7YE	Photography	We use photography to preserve the prints.
PNFB93	Photography	Once latent print development was observed the print was photographed with a measuring device. The photograph was uploaded into the TraQ evidence program and annotated. The photograph was then selected and within Photoshop. The image was grey scaled and the print was enhanced in color only. The image was then saved and calibrated 1:1 and printed.
PP7RR7	Photography Documentation	After the use of Indanedione with zinc. Photographed with a green light (505 nm) and orange filter. The print is marked up with a pencil, and a photo or a photocopy of the paper are taken to show where the print is located. If possible, the print is cut out, and stored With other case documents.
PQD9KA	None	No preservation methods were used as no marks were deemed sufficient enough to be photographed.
PQJJGF	Photography	AREA D labelled '19-5190 ITEM/1 C IND', photographed using Green 532nm Laser. Image converted to Black & White using Adobe CS4 Photoshop, as would be presented to Fingerprint Officers to enable comparison.
PQZF7U	Photography	The fingerprint in section D was photographed.
QAPDMD	Photography	Capture by DCS4 Fingerprint Enhancement System. (Foster+Freeman)
QDRDHW	[No Methods Reported.]	No method was used as no latent print development occurred.
QVWCG8	Scanning	
QXXM6U	Photography	An area of faint purple dots (not of value) was photographed using a macro lens and a scale.
R37679	TREATMENT BOARD AND PAPER	ITEM REPACKAGED IN ORIGINAL ENVELOPE BETWEEN TREATMENTS AND FOR IMAGING

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
RRPPUT	Photography	Using a lens camera filter.
T9PV3M	Photography	I used QIMAGING MICROPUBLISHER 5.0 to take digital photographs of the latent impression in Quadrant D of the piece of paper.
TAJHFQ	[No Methods Reported.]	No preservation method used.
TCRN4D	Photography	DCS-3, in light from range 430-515 nm, through the orange filter
TKKWN4	Scanning	
TXU83Y	repackaged in original packaging	Evidence repackaged back into original packaging.
U4W72A	Photography	
U6JUBP	Photography	
UEBAY8	Photography	Canon EOS 5 D Mark II, f/7.1, 5s shutter time, ISO-100. 100mm macro lens with a bright red filter (1% (nom) 571 nm). Light source used: Green light at 480-560 nm
URHD89	Photography	
UU4FCE	[No Methods Reported.]	No prints observed to preserve.
UUL4F9	Photography	With a Nikon D800
UULCV2	Photography	
UWC6LW	Photography	Photo taken after Ninhydin development with Nikon D610.
UXLWTT	Photography	Captured after DFO at 495nm wavelength
VDCLY9	Photography	Using DCS-5: The item was examined under alternate light source set at a wavelength of 529 nm and wearing orange goggles. Ridge detail was observed in quadrant D. Photographed after 1,2-Indanedione - Zinc Chloride treatments by using orange camera filter .
VDYRLU	Scanning	Scanned Ninhydrin processing ridge detail, overall of item and ridge detail

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
VMZGW4	N/A Photography	No impressions was development.
VUZBCV	Photography	
VWP9JV	Photography	Nikon D610, lens Nikon AF Micro Nikkor 60 mm.
VZLRPZ	Photography	Photos were taken of the area of positive processing under the alternate light source at 505 nm with an orange filter.
W86QW7	Photography	
WCELJA	Scanning	Color .TIFF 1200 dpi
WEMJB6	Photography	Green Light for DFO and White Light for Ninhydrin
WR7DF4	Photography	Light source green light visualisation.
WUZKXZ	Photography	Photographed following 1,2-Indanedione-ZnCl using LASER at 532nm with orange barrier. Also utilized A-FF-1 filter for additional photograph
WVALJY	Photography	
WY9KWR	Photography	Previewed in Foster Freeman DCS-5; photography
WZL8CJ	Photography	DCS5, Crimelite 8x4: blue/green light, orange filter
XFALAP	Photography	
XXG2TQ	Photography	After processing with 1,2 Indanedione-Zinc Chloride, captured digital images of ridge detail using both an orange filter and an A-FF-1 filter. (No improvement in contrast of ridge detail after processing with Ninhydrin so no additional images were captured.)
XYQNBJ	Photography	
Y2TMX3	Scanning	Item 1 was scanned using an Epson Perfection V600 scanner at 1200 PPI.
YJMWN7	Photography Photography	Photographed Indanedione Method with forensic light source at 515nm using an orange barrier filter. Photographed DFO Method with forensic light source at 475nm using an orange barrier filter.

TABLE 3 - Item 1

WebCode	Preservation Methods	Method Details
YK7JMN	Photography	Digital photography, image enhancement, print 1:1
Z3GR2T	Photography	"P-002" was photographed using a Nikon D700 camera. The possible suitable latent was photographed after applying 1,2-Indanedione, with a TracER LASER and orange barrier filter over the lens.
Z3V97U	Photography	Camera: Canon 60D + red filter. Light source: Foster &Freeman Green 480-560nm. Red filter glasses.
ZA2ZGD	Photography	
ZAWK2R	Photography	The fingerprint photographed using DFO.
ZJL7F3	Photography	Green light for DFO and white light for Ninhydrin
ZLAKXK	Photography	Forensic light 505nm after 1,2 indanedione zinc chloride process.
ZMMCTM	Scanning	Area D was scanned to show what was developed; however, no ridges were observed.
ZQ3Y7R	Scanning	Scanning would have been preservation method of choice if developed print appeared to be identifiable. Raw or TIFF format with scale.

Response Summary

Participants: 198

Methods Utilized

Lifting	1
Photography	154
Scanning	22

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

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
239ENG	Photography	Latent photograph - 07/12/2019 - 1219 hours (item #2DLPa). Latent photograph - 07/12/2019 - 1222 hours (item #2DLPb).
	secured evidence with lifting tape	As a latent lift was not possible, the square of tape (item #2D) was secured between a lift backer and clear lifting tape in order to preserve the fingerprint impression on 07/12/2019 at 1231 hours..
2BAMCW	[No Methods Reported.]	My unit does not process silver duct tape (adhesive side) such as Items 2A, 2B, 2C and 2D, therefore, I was unable to complete the Item 2 section of this examination.
2KCPU9	Photography	
2T6MCM	Photography	photographed and saved as tif
2UF84Q	Photography	Photograph taken with Nikon D600 no filter used.
2WP89X	Photography	Digital photography was used.
2ZPQJP	Placed back on non stick surface as received	Sample Protected as received after development.
3DU74Y	Photography	07/01/2019: Nikon D300 camera on copy stand, RAW format, Aperture priority, 90 degrees to item, Angled lighting. Photographs captured (Only silver piece of duct tape with the letter "D") - Overall of non-adhesive side/side with the letter "D" and adhesive side/side without the letter "D", Adhesive side/side without the letter "D" with scale present. After completion of additional black WetWop processing, no additional photographs captured. Photographs captured uploaded into Digital TraQ. Photograph of adhesive side/side without the letter "D" with scale present was enhanced two separate times in Photoshop. Enhancements were calibrated 1:1 in TraQ and printed
3KCRYN	Photography	All developed prints were photographed
3T3U2E	Photography	I photographed a developed latent after using wetwop.
3UV9HH	Photography	Photographed using Camera 3/Lens 3 under direct fluorescent light.
3ZK69N	Photography	
473XWT	Photography	Images saved in JPG and RAW at 1000 dpi, and transferred to DVD.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
49ZML2	Photography	DSC-4 system used to photograph positive latent print (inherent fluorescence), utilized orange filter with ALS Tracer.
	Photography	DSC-4 system used for control sample only on GV.
	Photography	DSC-4 system used for improved latent print on PSB including control sample.
49ZP9K	Photography	The ridge detail developed on the adhesive side of tape square D was photographed in RAW format, with a surface to sensor distance of no greater than 0.49 meters.
4AM3FN	Photography	Nikon D7000
4APPW3	Photography	Photographs of the four pieces of tape were taken to show no ridge development, and I also photographed my two QC samples to show that prints did develop on those. Photos were captured using a Nikon D3400 camera.
4HWDLU	Photography	Foster Freeman- DCS 5
4KB2JT	Photography	Digital Photography - Nikon D7200 (RAW) - one impression on piece D photographed
	Adobe Photoshop CS6	Image calibrated and processed for best detail - created a grayscale composite sheet for the file and saved on a CD
4QUHUH	Photography	Nikon D810 was used to photograph a developed print at at least 1000 ppi.
4RRAUQ	Photography	
4UV3L4	Photography	Nikon D5300
63PT3P	Photography	Photographed the developed print on the adhesive side of the piece of tape "D" using DCS-4 with white light from ALS. No other prints developed.
6BZADW	Photography	1 image - RAY, direct with polilight 2 at 450nm with orange filter. camera settings in metadata
6MUQ3W	Photography	DCS-4-QD
6TVK4Y	Photography	Photographed using fiber optic lights. Also took overall photograph using fiber optic light.
6WW8YN	Photography	Item 2 was photographed prior to processing, and after each processing method.
6XPGTP	Photography	06/03/2019 Photographed with a scale.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
6XU4EQ	Photography	Incandescent lighting
6YQH7P	Photography	Using the DCS, I took one photograph of the ridge detail with a scale.
6ZW4FN	Visual Processing	Silver duct tape "D" was visually processed after development; fingermark determined to be NOV
73EDUL	Photography	Nikon D700.
7FLBNN	Photography	
7LUTPF	Scanning	Scanned at 1000 ppi
7R2VGX	Photography	(Orange Filter)
7XMT6K	Photography	A digital camera equipped with a 1:1 lens was used. The developed print on item D was photographed with and without a scale.
839ARU	Photography	light source
83E4PN	Photography	One photograph taken at or greater than 1000 DPI
8B6ZGC	Scanning	Adobe Photoshop
8DXW76	Photography	(Red Filter)
8DZ8WM	Photography	DCS used with white light
8LA4NU	Photography	Digital camera; white light after wet powder; RAW/TIFF format.
8REWUJ	[No Methods Reported.]	None - not required.
8UMKDZ	Photography	Used after black wetwop. Camera was checked to make sure the photograph was taken at a one (1) to one (1) ratio. A scale was used.
8WRRJT	Photography	Photographed with scale.
8WT74L	Photography	
8X4RTM	Photography	Digital photographs of item and developed areas. Enhancement of original photograph through Photoshop using existing Standard Operating Procedures.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
983NTP	Photography	Photographed with light source and measurement.
987M9X	Photography	Gentian Violet: Crime Scene Unit - Camera 3/Lens 3, one (1) image with direct fluorescent lighting and one (1) image with oblique flood lighting
	Photography	Black Wetwop: Crime Scene Unit - Camera 3/Lens 3, direct fluorescent lighting
	Photography	RAY: Crime Scene Unit - Camera 3/Lens 3, direct lighting using Rofin Polilight FLARE Plus 2 (450nm filter) with orange camera filter
9DVGFQ	Photography	white light
9HQWWR	Photography	Digital photography using a scale and macro lens.
9JXVUZ	[No Methods Reported.]	No latent prints developed
9U36XX	Photography	Foster and Freeman DCS-5
ABJ7U8	Photography	
AG7WEG	Photography	Nikon D4S
ALGAVF	Photography	Took 1 photo of the print on Tape D. Put to disc. sub-itemed ".photos"
AN7KQE	Photography	Photography- using Foster Freeman, white light
APZ6Y6	Photography	white light
AR8J8Y	Photography	
B2QU9H	Photography	An overall and close-up were taken with a scale.
B3LGPT	Photography	DCS-5 system
B3LJCC	Photography	
B6N4WK	Photography	white light, no filter
B9QTL7	Photography	A photograph of the fingermark was conducted (DCS 4 system) after black Wetwop treatment
	Safe packaging and storage	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
BQNHTF	Packaged in pill box	Packaged in pill box so it would not adhere to anything. To be sent to latent print unit
BWHUX8	Photography	Adobe Photoshop
C2A6HB	Photography	
C47AWB	Photography	
C4BP9B	Photography	
C7X9CU	Photography	RAW, ISO 100, F22, Scale
C88VKD	Photography	Nikon D810. Camera Control Pro 2. Ambient light
CA4KGB	Photography	The print observed in quadrant 2D was photographed with a digital camera after being processed with Black Wetwop with the white light option from an alternate light source "ROFIN Polilight PL500".
CFNP63	Photography	Photography under white light
CJM3TU	Photography	The fingerprint was photographed at every step of a research
CPAVWG	Photography	
CQ9GTY	Photography	One image of item 2D was taken with LP-Camera 9/Lens 2, using a flood light with oblique lighting.
CYXQXH	Photography	Canon EOS 5D MarkII + 100mm L2.8 macro. Polarized filter
D62QQP	Photography	The impression was preserved by using a Digital Capturing System (DCS-5) made by Foster and Freeman. To capture the impression found in visual a laser (Tracer) was used.
D8RRWD	Photography	
DHMMQG	Photography	Presumed by photography. Restuck to the rice paper that it was submitted to office.Photos submitted to latent office
DJKN2E	Scanning	100% @ 1200 ppi
DKVPND	Photography	
DPM2GP	Photography	(Yellow Filter)

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
DWQ4LP	Photography	Photographs taken of items post-processing to illustrate lack of friction ridge development.
E6GQ9E	Photography	
EEK47U	Photography	
EMV3Z6	Photography	Ridge detail observed and photographed in Section D. Photographs taken with macro camera lens and scale.
EP3KY2	Photography	I took one digital photograph of a latent impression after processing with Wet Wop. The digital photograph was stored onto a compact disc.
F9UVF9	[No Methods Reported.]	none required
FG83XX	Photography	
FP28QY	Photography	Digitally photographed and uploaded. Low count loop or possible arch.
FRTMGF	Photography	1:1 (2 photos)
G4XLN8	Photography	
G73WD2	Photography	
G8EC82	[No Methods Reported.]	Ridge detail determined to not be of value for identification. No photography needed.
GBDAJ9	Photography	We took a photo of the print in digital format and saved it. Then the photo is treated in order to clearly identify the print.
GHELE7	Photography	
GLBBVD	Photography	
GMRXDD	Photography	Photographed developed print and printed 1:1
GR7FUU	Photography	One photograph taken of WWB from item marked 2(D).
GWWQ38	Photography	One digital image taken at F/8, 1/50 with ISO set at 200.
H6N8WN	Photography	camera Nikon D800e lens AF Nikkor 105 mm with evidence scales.After every method the trace was protected by photography.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
H9PTLR	Photography	The item was photographed using a Nikon D300 camera with a Micro Nikkor 105mm Lens, mounted to an adjustable column. The resolution was adjusted greater than 1000 pixels per inch for comparison quality. The area was focused using a prepared template that show the maximum image area for the camera. A scale was used to document Case Number, Item Number, Process Used, Date of Photograph, and Initialed. Photographs were subsequently uploaded to the IMPD Latent Print Image Server.
HAJH4M	Photography	Photographs of area were taken with and without a scale using a department issued digital camera and a photo card. The photo card was packaged in an evidence bag. The pieces were repackaged in the original evidence packaging.
HDF948	Photography	Black Wet Powder - Nikon D810 camera; Camera Control Pro 2 image capture software; Captured as NEF; Image viewed and calibrated greater than or equal to 1,000 ppi using Adobe Photoshop CC and saved as TIF; One (1) image captured and calibrated
HDGFHF	Photography	Photographed on a Nikon D850 with white light. 5 photos taken of Area D1.
HTUQ8M	Photography	Photo Evidence Scale
HUK84G	Photography	Digital photography was taken of ridge structure on the adhesive side of the duct tape labeled "D" after black sticky side powder was applied
HUPUWA	Photography	
HVD6BN	Photography	Ridge detail was determined not enough and not photographed. If ridge detail would have been sufficient-photos would have been taken.
HVKFJ9	securing	Letter D was secured to clear plastic and put into another envelope separate from Letter A, B, and C
J2NY3J	Photography	06.14.19 Gentian violet, camera 9, lens 2, direct lighting, one image. 06.14.19 WetWop, camera 9, lens 2, direct lighting, one image. see image metadata for camera settings
J6Z9BB	Photography	Usual setting for cyano traces
JB8U3E	Photography	Without scale and then with a scale.
JDWECA	Photography	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
JDXV92	Photography	
JHRBU9	Photography	Macro photography
JLPWH6	[No Methods Reported.]	FRD observed on "D" does not contain clarity and quantity, of value, for capture.
JU2PF2	Photography	Digital photography with scale of latent print mark on tape marked D.
K4HWRV	Photography	DCS 4 System with Polarizer filter. Printed 1:1
K4KJ7N	Photography	Once the latent print was visible, I photographed same with my Nikon D5600 camera and scaled. Latent print appeared on tape square labeled "D".
K6DFTV	Photography	Photography of the mark after every step of examination
KE6P6D	Photography	Initial photography, photography after wetwop application (TIF, Macro)
KEKYA8	Photography	
KQKHZE	[No Methods Reported.]	no ridge structure collected
KXCZ7B	Photography	The latent print was photographed with a metric scale. The duct tape and latent print were preserved by placing the duct tape on a sheet of clear plastic.
KZK7RC	Photography	THE LATENT FINGERPRINT ON THE ADHESIVE SIDE OF THE SILVER DUCT TAPE WAS PHOTOGRAPHED 1 TO 1 USING AN L SCALE RULER TO SUBMIT THE FINGERPRINT TO THE "LATENT PRINT UNIT".
	Actual evidence was submitted	THE ACTUAL PIECE OF DUCT TAPE WITH THE FINGERPRINT ON IT WAS PRESERVED WITH SCALE TAPE PLACED ALONG THE SIDES (FOR FUTURE MEASURING PURPOSES) AND IN PLACED BETWEEN TRANSPARENT BACKING SHEETS (FOR FUTURE VIEWING). BOTH THE PHOTOGRAPH AN DUCT TAPE WITH THE FINGERPRINT ON IT WAS PLACED ON A PROPERTY RECEIPT AND SUBMITTED TO THE [Laboratory] LATENT PRINT UNIT TO BE COMPARED TO ANY SUSPECTS, OTHER RELATED INVESTIGATIONS AND ENTERED INTO "AFIS" FOR FURTHER EVALUATION.
L2UKQ6	Photography	Slight development of finger-shaped impression photographed on adhesive side of item.
L83VQC	Photography	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
LFFDFH	Photography	Foster & Freeman DCS-4 used to record positive development
LG8TQ9	Photography	Labeled scale placed near developed LP on item 2D.
	Covered with lifting tape	Fingerprint lifting tape applied to adhesive side of item 2D to preserve developed LP.
LJAX29	Photography	Photographed after Gentian Violet (oblique lighting and ALS 520nm with red filter) and after Wetwop
LM96M7	Lifting	Nikon D800 and macro lens, visible light and copy stand light
LMFVTA	[No Methods Reported.]	Print observed on tape D. Ridge detail was insufficient for collection.
LPGG68	Photography	
LPZ43P	Photography	Nikon D750, Nikkor 60 mm Macro
LWLH2A	Photography	Use of DCS-4 to capture images after tape was allowed to dry
LZKZY2	Photography	
M27L7C	Photography	Photographed.
M6B4CK	Photography	Photos of ridge detail labeled MLP3 on adhesive side of tape "D" taken.
M7KUB9	Photography	I photographed the overall evidence item and print "D" with a scale, using the DCS and white light.
MCQ3K6	Photography	TM 2D.1 in D section. White light is used (400-700 Nm) to photograph the developed latent print (partial as well as detail)
MEWXG8	Photography	Digital image taken by Nikon D7000, All images were burned to a CD that was secured as Item #HFIU1. Images of impression labeled 2DL1 are DSC_0024.jpg through DSC_0044.jpg.
MLD2BA	Photography	Scaled photographs with macro lens
MQPE79	Photography	Photographed L1 (after WW) - back of Item 2D with scale
MR6RU6	Photography	
MYHA87	Photography	Visual examination

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
MYJWUC	Photography	
MZVX8X	Photography	Photographs were taken using the macro lens.
NAZ2EG	Scanning	Area where print was observed was scanned with scale, the image was then enhanced and printed 1:1.
NCMM6H	Photography	Photographed four pieces of silver duct tape prior to processing. I was able to develop a latent print with ridge detail on the piece of tape labeled "D". The print was labeled and photographed using a 50mm lens in RAW at ISO 100 and F16.
NFLX2H	Photography	Photographed latent print with scale using 50mm lens. Photographed in RAW at 100 ISO and F16.
NJJMF6	Photography	
NZ9P3Z	Photography	Canon EOS Rebel T6i Camera
P2NU8W	Photography	1 photo of item 2D was taken on Camera 3/Lens 3.
P63M4G	Photography	Sample "D" was photographed using Camera 3/Lens 3 in the Crime Scene Unit after Gentian Violet processing. Two (2) photographs were taken using direct lighting with and without an orange filter. Sample "D" was photographed using Camera 3/Lens 3 in the Crime Scene Unit after Black Wet Wop processing. Two (2) photographs were taken using direct lighting.
P7BAMB	Photography	Wave length 440nm after using BY40.
PECPPH	Scanning	Friction ridges were observed on item 2D. Item 2D was scanned using the Epson Scanner 13 and the appropriate settings. A photo card with a scale, the case number, date, processing method, item number and my initialed was placed next to the item.
PKEHH8	Photography	Friction ridge impression on sample D photographed using oblique lighting.
	Tape	Friction ridge impression preserved in place by placing lift tape over the adhesive side of sample D.
PLNBA7	Photography	Photographed print developed with Wetwop with DCS system

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
PM8UHJ	Photography	Photography of print observed with Wet Wop was completed with Camera 3/Lens 3, with overhead lighting, no additional lighting. 1 image recovered.
	Scanning	Preservation of print observed with Wet Wop was completed with Scanner 13. 1 image recovered.
PNB7YE	Photography	If i would have visualized any prints, i would have photographed it.
PNFB93	[No Methods Reported.]	None. No ridge detail was developed on any of the tapes (A-D). Proper protocol and our SOPs were followed in the processing of the item above. No ridge detail was development and in our unit the results would be labelled as No latents of value.
PQD9KA	Photography	Any suitable marks developed throughout sequential treatment were marked up and photographed 1:1 using a D810 Nikon digital camera with an AF-5 micro nikkor 105mm lens, 8x4 Crime Lite light source(s) and appropriate camera filter(s). The camera is linked to DCS5 (Digital Capture System 5) software where the images are exhibited with full audit trails and further DCS5 enhancement tools can be used to improve contrast/ remove background interference where applicable. Exhibited images then submitted to the Fingerprint Bureau for further analysis and comparison. Although mark developed in item 2 was not deemed as sufficient as no ridge detail was present, the mark was still photographed to show the outline of the mark.
PQJJGF	Photography	AREA D labelled '19-5190 ITEM 2 B WBC', photographed using white light source at the copy stand.
PQZF7U	Photography	The fingerprint in section D was photographed.
QAPDMD	Photography	Capture by DCS4 Fingerprint Enhancement System. (Foster+Freeman)
QDRDHW	[No Methods Reported.]	Placed item "D" into a coin envelope and packaged. Will be submitted to latent print unit for analysis.
QVWCG8	Scanning	
QXXM6U	Photography	The latent print was photographed using a macro lens and a scale.
R37679	DRYING	WHISLT DRYING THE PIECES WERE SUSPENDED ON HOOKS IN THE DRYING ROOM. FOR IMAGING THE ITEM WAS PINNED DOWN ON FOAM ADHESIVE SIDE FACING UP AND SECURED IN A BOX.

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
RA88YR	Photography	Wet Powder Suspension: One (1) digital image taken with camera/lens three on June 28, 2019. See image metadata for settings. (Piece D)
RGALXV	Scanning	Latent print from Item D was scanned at 1200dpi. The scanned latent was enhanced through photoshop. Area of the core of the latent was poor and not able to determine a pattern type.
RRPPUT	Photography	Used white light for photography.
T9PV3M	Photography	I used QIMAGING MICROPUBLISHER 5.0 to take a digital photograph of the latent impression on the adhesive side of the grey tape labeled D.
TAJHFQ	Photography	
THG7F4	Photography	Ridge detail photographed w/ digital camera & scale.
TKKWN4	Scanning	
TXU83Y	wax paper	Duct tape placed back onto wax paper adhesive side down
U4W72A	Photography	
U6JUBP	Photography	
UDG6GY	Photography	DCS4 workstation was used to obtain photographs
UEBAY8	Photography	Canon EOS 5 D Mark II, f/25, 13s shutter time, ISO-100. 100mm macro lens and UV light at 350-380 nm(to prevent reflections)
UKDH6Z	Photography	
UM2QU4	Photography	DIGITAL PHOTOGRAPHS W/ SCALE
URHD89	Photography	(Orange Filter)
UU4FCE	Photography	Camera 3/lens 3. GV: Direct LED lighting with orange filter. Wet-wop: Direct LED light. 1 image submitted for GV and 1 image submitted for WW for item 2D.
UUL4F9	Photography	With a Nikon D800
UULCV2	Photography	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
UWC6LW	Photography	Photo of print was taken after tape was allowed to dry. - Limited friction ridge detail- not suitable for determination.
UXLWTT	Photography	Captured after Wet powder suspension
VDCLY9	Photography	Using DCS-5: They were examined under white light source. Ridge detail observed in quadrant D. Photographed after Adhesive Side Developer treatment
VDYRLU	Photography	Photographed LASER - Inherent Luminescence and CA fuming-Rhodamine ridge detail
VMZGW4	Lifting Photography	Adheres the silver duct tape to an acetate
VUJD87	[No Methods Reported.]	Piece D was taped onto a latent print lift card.
VUZBCV	Photography	
VVVXNY	Photography	Captured the print at 1000 dpi or greater.
VWP9JV	Photography	Nikon D610, lens Nikon AF Micro Nikkor 60 mm.
VZLRPZ	Photography	Photographed fingerprint with scale.
W86QW7	Photography	
WCELJA	Photography	.RAW with macro lens
WLQ7Y6	Photography Photography	6-14-19 Photographed 1 print on Item 2D sticky side, Gentian Violet print. Nikon Camera 9 lens 2. 6-14-19 Photographed 1 print on Item 2D sticky side, Black Wet Wop print. Nikon camera 9 lens 2.
WR7DF4	Photography	
WUZKXZ	Photography	Ambient lighting
WY9KWR	Photography	6/26/2019 print developed on adhesive side
WZL8CJ	Photography	DCS5, White light
XFALAP	Photography	

TABLE 3 - Item 2

WebCode	Preservation Methods	Method Details
XYQNBJ	Photography	
Y2TMX3	[No Methods Reported.]	Preservation of the prints observed were not recorded due to a lack of discernible ridge detail.
YJMWN7	Photography	Photographed Dye Stain/MBD Method with forensic light source at 455nm using an orange barrier filter.
YK7JMN	Photography	Digital photography, image enhancement, print 1:1
Z3GR2T	Photography	"P-003" was photographed using a Nikon D700 camera. The possible suitable latent was photographed under white light after application of the adhesive side powder.
Z3V97U	Photography	Camera: Canon 60D. Light source: Foster & Freeman UV 350-380nm (Frontside of the tapes). Light source: White (Backside of the tapes.)
Z94CTT	Photography	Digital
ZA2ZGD	Photography	
ZAWK2R	Photography	The fingerprint photographed using Wet Powder Black.
ZLAKXK	Photography	White light
ZMMCTM	Photography	No latent prints observed or developed on the non-adhesive side; ridge detail developed on adhesive side was photographed, Section D.
ZQ3Y7R	Photography	Photographed developed latent print. Raw format with scale.

Response Summary

Participants: 219

Methods Utilized

Lifting	2
Photography	197
Scanning	9

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

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
239ENG	Photography	Latent photograph - 07/11/2019 - 1358 hours (item #3B-LPa).
	Lifting	Latent lift - 07/11/2019 - 1406 hours (item #3B-LLa).
26ZBDB	Photography	(Yellow Filter)
28T3R3	Lifting	Clear Sirchie lifting tape adhered to white fingerprint card.
28UHV8	Photography	see metatdata
2BAMCW	Scanning	On 7/11/2019 at approximately 10:55am, the impression on Item 3B was scanned and copied.
	Lifting	On 7/11/2019 at approximately 11:00am, the impression on Item 3B was lifted with Sirchie fingerprint lifting tape and placed on a latent print card.
2KCPU9	Photography	
2T6MCM	Photography	photographed using crimescope at 515nm with orange filter
2UF84Q	Photography	Photograph taken with Nikon D600 using alternate light source (blue laser) and filters (515 and light orange).
2W77JA	Lifting	Transfered to white card / applied another layer of metallic powder and protected with fingerprint tape
2WP89X	Photography	LabKam and digital camera were used.
	Lifting	The latent print was lifted and placed on a transparent backer after photography was complete.
2ZPQJP	Lifting	Print developed, lifted with clear lifting tape and placed on lift card.
3DU74Y	Lifting	06/28/2019: Lifting tape and white backing card
3KCRYN	Photography	All developed prints were photographed
	Lifting	Dusted print was lifted
3T3U2E	Photography	I photographed the latent impressions during visual examination using the LASER and orange googles, and after cyanoacrylate fuming with the FSIS and the shortwave UV lamp and filter. I also photographed the latent after powdering the item.
	Lifting	I lifted the latent after powdering and photographing.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
3UV9HH	Photography	Photographed using Camera 3/Lens 3 under direct fluorescent light.
3ZK69N	Photography	
473XWT	Photography	Images saved in JPG and RAW at 1000 dpi, and transferred to DVD.
49ZML2	Photography	DSC-4 system used to photograph positive latent print (inherent fluorescence), utilized orange filter with ALS Tracer.
	Photography	DSC-4 system used for improved latent print on LUMI including control sample.
49ZP9K	Photography	The ridge detail developed on tile B was photographed in RAW format, using an orange filter and 450nm light source, with a surface to sensor distance of no greater than 0.49 meters.
4AM3FN	Photography	Nikon D7000, Bright Beam laser (532nm/orange and FF1 filters)
4APPW3	Photography	A photograph of developed prints was captured using a BrightBeam laser at a 532nm wavelength and a Nikon D3400 camera with an orange filter.
4HWDLU	Photography	Foster Freeman DCS-5 (UV Light)
4KB2JT	FSIS	Captured and re-captured (two photographs of the same impression) one impression on piece B under FSIS shortwave UV light and specialized filter
	Adobe Photoshop CS6	All of the images were examined using Adobe Photoshop CS6 and the image containing the best detail (first FSIS captured image) was selected (other image was discarded), calibrated and processed for best detail - created a grayscale composite sheet for file and saved on a CD
4QUHUH	Photography	Nikon D810 was used to photograph a developed print at at least 1000 ppi.
	Lifting	One tape lift was collected after black powder.
4RRAUQ	Photography	
4UV3L4	Lifting	hinge lifter
63PT3P	Lifting	Lifted the developed print from disc "B" and placed the tape on a lift card.
6BZADW	Photography	powder - 1 image, direct fluorescent lighting, ridge detail on disc "B". see image metadata for camera settings

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
6FLQNF	Photography	With the yellow filter
6MUQ3W	Photography	DCS-4-QD, DCS-5-W1-53
6TVK4Y	Photography	Photographed using laser @ 532nm with orange barrier filter. Also took overall photograph with tungsten light.
6WW8YN	Photography	Each disk was photographed prior to processing, and after each processing method.
	Lifting	The suitable fingerprint impression observed on disk B was lifted with two inch fingerprint tape and transferred to a latent fingerprint card.
6XPGTP	Photography	06/04/2019 Inherent luminescence photographed with a scale and using green laser 532 nm with an orange filter. Black Powder photographed with a scale.
	Tape	Latent Tape was placed over the developed latent print to prevent damage when it was repackaged.
6XU4EQ	Photography	Photos taken with incandescent light and the ALS at 455 nm with orange filter (post Lumicyano). Photos were also taken with the ALS at 350 nm with yellow filter (post Ardrox). After powder dusting, the latent was photographed using incandescent light.
	Lifting	Transparent hinge lift
	Photography	Photograph of lift was taken in incandescent light.
6YQH7P	Lifting	Using lift tape, I adhered it to the back of the disc and smoothed out any bubbles. I then lifted the tape from the item and applied it to a white latent print card. I drew my arrow of orientation on the card and filled out the rest of the information on the back.
6ZW4FN	Lifting	Metal roofing disc "B", opposite side of "B" marking, appeared to have a suitable fingerprint. Item was lifted, placed onto a lift card and entered into the Traq system
73EDUL	Photography	Nikon D700.
7FLBNN	Photography	
7LUTPF	Lifting	Two tape lifts
7P98WG	Photography	
7R2VGX	Photography	(Yellow Filter)

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
7XMT6K	Photography	Disc B was photographed with a digital camera equipped with a 1:1 lens. Photographs were taken with and without a scale.
839ARU	Photography	light source
83E4PN	Lifting	Tape lift (2 inch lifting tape)
8B6ZGC	Scanning	Adobe Photoshop
8DXW76	Photography	(Yellow Filter)
8DZ8WM	Photography	DCS used with white light. Print was not lifted due to the metal surface and the uncertainty if the print would lift.
8LA4NU	Photography	Digital camera; 550 nm and orange filter after visual examination, than 450 nm and orange filter after Basic Yellow 40; RAW/TIFF format.
8REWUJ	[No Methods Reported.]	None - not required.
8UMKDZ	Scanning	The item was flat and therefore the opportunity to scan was taken advantage of. The settings are double checked to make sure they comply with the Standard Operating Procedures. A scale was used.
	Photography	Used after RAY. Camera was checked to make sure the photograph was taken at a one (1) to one (1) ratio. A scale was used.
	Lifting	A lift was taken using latent print lift tape. The lift was placed on a latent print lift card. The card was filled out accordingly.
8WRRJT	Photography	Photographed with scale.
8WT74L	Lifting	
8X4RTM	Photography	Digital photographs of item and developed areas. Enhancement of original photograph through Photoshop using existing Standard Operating Procedures.
983NTP	Photography	Photographed with light source and measurement after fuming and powder dusting.
	Lifting	Print lifted on tape after improvement with powder.
987M9X	Scanning	Black powder: Crime Scene Unit - Scanner 13, direct lighting
	Photography	Black powder: Crime Scene Unit - Camera 3/Lens 3, bounce LED lighting

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
9DVGFQ	Photography	blue light (430nm), yellow filter (495nm)
9HQWWR	Photography	Digital Photography using a scale and a macro lens with OCB filter attached under the Laser with blue light (445nm).
9JXVUZ	Photography	The best quality latent print on 3B was developed with black powder. All images were captured with a camera: RUVIS - direct balance UV lighting with a 254nm bandpass filter; Laser - direct balance laser lighting using an orange filter; White light - direct balance lighting/no filter. Images were captured in TIFf format with accompanying scale/photo tag containing case number, item number, date of capture, and other required information.
9U36XX	Photography	Foster + Freeman DCS-5
ABJ7U8	Photography Lifting	
AG7WEG	Photography	Nikon D4S
AJWNJD	Scanning	Scanned with case number, date, item number, processed used, and intials.
ALGAVF	Photography	Took photograph of print on "B" and put on disc sub-itemed ".photos".
AN7KQE	Photography	Photography using Fpater Freeman on IR setting and Fluorescent Mark 8, 529 nm(blue light) on RAM stain
APZ6Y6	Photography	blue-green light and orange filter. DCS4 (Foster & Freeman)
AR8J8Y	Photography	
B2P7LD	Lifting	The latent print developed on medallion "B" was lifted using clear, 2 inch lifting tape and secured to an [Laboratory] form # 74 card for examination.
B2QU9H	Photography	Under ALS at 515nm an overall and close-up were taken with a scale.
B3LGPT	Photography	DCS-5 system
B3LJCC	Photography	
B6N4WK	Photography	ALS at 495 nm, orange filter

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
B9QTL7	Photography Safe packaging and storage	A photograph of the fingermark was conducted (DCS 4 system) after Lumicyano Powder treatment
BQNHTF	Lifting	Lifted with fingerprint tape and adhered to [Laboratory] Form 74 - latent print card
BWHUX8	Photography	Adobe Photoshop
C47AWB	Photography	
C4BP9B	Photography	
C7X9CU	Lifting	Latent print tape/latent print card
C88VKD	Photography	Captured as-received with inherent fluorescence: Nikon D810/orange filter/455 nm alternate light (Crimescope CS-16-500), Camera Control Pro 2. Captured post cyanoacrylate/RAM: Nikon D810/orange filter/475 nm alternate light (Crimescope CS-16-500), Camera Control Pro 2
CA4KGB	Photography	The print observed in quadrant 3B was photographed with a digital camera after being processed with dye stain, rinsed after dye stain, and PSS. For photographs after dye stain and water rinse - an orange 23A filter was used and the alternate light source at 505nm was used. The white light option from the alternate light source was used to take the print images after PSS.
CFNP63	Photography	after fuming cyanoacrylate : Photography under white light & under UV light
CJM3TU	Photography	The fingerprint was photographed at every step of a research
CPAVWG	Lifting Photography	
CQ9GTY	Photography	ALS: One image from item 3B was taken using LP-Camera 9/Lens 2 with direct light from a Polilight 2 (450nm, orange filter on the camera). POWDER: One image from item 3B was taken using LP-Camera 9/Lens 2 with diffused lighting from a flood light .RAY: One image from item 3B was takne using LP-Camera 9/Lens 2 with direct light from a Polilight 2 (450nm, orange filter on the camera)
CYXQXH	Photography	Foster&Freeman UV light (350-380 nm). Canon EOS 5D MarkII + 100mm L2.8 Macro. Polarized filter

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
D3FN36	Photography	One (1) latent fingerprint developed with black powder
D62QQP	Photography	The impression was preserved by using a Digital Capturing System (DCS-5) made by Foster and Freeman. To capture the impression found in visual a laser (Tracer) was used. to capture the images for impression that was developed for LUMI a laser (Tracer) and a blue light with a yellow filter was used.
D8RRWD	Photography	
	Lifting	
DHMMQG	Lifting	Preservation by photography. Latent lifted and place on latent card. Metal placed back in envelope.
DJKN2E	Lifting	The latent fingerprint was lifted and placed on a latent lift card. Black powder was then reapplied to the developed latent print and lifting tape was placed over the latent fingerprint on the metal disc to preserve it as well.
	Scanning	The latent fingerprint was scanned directly from the metal disc as well as the metal disc side labeled B. All scans were 100% @ 1200 ppi.
DKVPND	Photography	
	Lifting	Lift was also scanned
DPM2GP	Photography	(Yellow Filter)
DWQ4LP	Photography	Latent print photographed using Nikon Macro system.
E6GQ9E	Photography	A photograph of the fluorescent ALS/Laser R6G dye stained ridge detail was taken and labeled.
EEK47U	Photography	
EMV3Z6	Photography	Ridge detail observed and photographed in Section B. Photographs taken with macro camera lens, orange 550 nm filter, blue 455 nm light, and scale.
EP3KY2	Photography	I photographed the latent impression at each stage. Four digital photographs were stored onto a compact disc.
	Lifting	I lifted the latent impression. I then re-powdered and lifted the same latent impression a 2nd time.
EWNDCL	Photography	Using suitable light and DCS 5 photography system
	Lifting	Using clear lift

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
EZNP9L	Photography Lifting	Using suitable light and DCS 5 photography system Using clear lift
F3MZGC	Photography	
F9UVF9	[No Methods Reported.]	none required
FG83XX	Photography	
FP28QY	Photography	Digitally photographed and uploaded. Pattern listed below only applies to the impression captured on disc B; the images captures on discs A and C were not suitable for determination.
FRTMGF	Lifting	One print lifted.
G4XLN8	Photography	
G73WD2	Photography	
GBDAJ9	Photography	We took a photo of the print in digital format with forensic ligth (yellow filter 415nm) and saved it. Then the photo is treated in order to clearly identify the print.
GHELE7	Photography	
GLBBVD	Photography	
GMRXDD	Lifting	Tape lifted developed print and attached to fingerprint card.
GR7FUU	Photography	After black powder was applied I photographed item marked 3B. 1 photo was taken.
GWWQ38	Lifting	One lift with tape.
H6N8WN	Photography	camera Nikon D800e lens AF Nikkor 105 mm with evidence scales. After every method the trace was protected by photography.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
H9PTLR	Photography	The item was photographed using a Nikon D300 camera with a Micro Nikkor 105mm Lens, mounted to an adjustable column. The resolution was adjusted greater than 1000 pixels per inch for comparison quality. The area was focused using a prepared template that show the maximum image area for the camera. A scale was used to document Case Number, Item Number, Process Used, Date of Photograph, and Initialed. Photographs were subsequently uploaded to the [Laboratory] Latent Print Image Server.
	Lifting	The item was scanned using a scanner set to a resolution of 1200 pixels per square inch for comparison quality. A scan was subsequently uploaded to the [Laboratory] Latent Print Image Server.
HAJH4M	Lifting	The area was lifted using frosted tape, affixed to (1) latent print card and packaged in an evidence bag. The discs were repackaged in the original evidence packaging.
HDF948	Photography	Alternate Light Source - Nikon D810 camera; Camera Control Pro 2 image capture software; Crimescope at 415nm with yellow filter; Captured as NEF; Image viewed and calibrated greater than or equal to 1,000 ppi using Adobe Photoshop CC and saved as TIF; One (1) image captured and calibrated
	Photography	Cyanoacrylate Fuming - Nikon D810 camera; Camera Control Pro 2 image capture software; Crimescope at 000nm without filter at an oblique angle; Captured as NEF; Image viewed and calibrated greater than or equal to 1,000 ppi using Adobe Photoshop CC and saved as TIF; Four (4) images captured and calibrated
	Photography	Black Fingerprint Powder - Nikon D810 camera; Camera Control Pro 2 image capture software; Captured as NEF; Image viewed and calibrated greater than or equal to 1,000 ppi using Adobe Photoshop CC and saved as TIF; One (1) image captured and calibrated
HDGFHF	Photography	Photographed before processing. Area of ridge detail on disc B, photographed with UV light and a yellow filter on a Nikon D850 camera. 6 photos were taken.
	Lifting	Black fingerprint powder was applied to the discs. An area of ridge detail was visible on disc B. Using 1.5 inch fingerprint tape, lifted print and placed on a white fingerprint card. Card is filled out with information on location of lift, CSA whom lifted the print, and the date/time of the lift.
HTUQ8M	Photography	Photo Evidence Scale
HUK84G	Photography	Digital photography of ridge structure on the reverse side of labeled disc "B" taken after each processing step, photos taken with LabKam before and after Cyanoacrylate and a photo taken under the Polilight after RAY

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
HUPUWA	Lifting	
HVD6BN	Photography	Photos taken with 505nm FLS.
HVKFJ9	Lifting	lifted with tape and placed on latent lift card.
J2NY3J	Photography	Camera 9/lens 2. 06.12.19: black powder, direct fluorescent lighting, 1 image. 06.12.19: RAY, polilight flare 2, orange filter, 1 image. see image metadata for camera settings
J6Z9BB	Photography	Usual setting for cyano traces
JB8U3E	Photography	Without scale then with scale.
JCF28R	Photography	(Red & Yellow Filter)
JDWECA	Photography Lifting	
JDXV92	Photography	
JHRBU9	Photography Lifting	Macro photography Lifted with clear latent print tape
JLPWH6	Photography	FRD on disc "B" captured using Nikon D810, with Crimescope at CSS wavelength using an orange filter. Image digitally processed using PS Creative Cloud, calibrated 1:1 at greater than 1000 ppi and saved in TIF format on T: drive.
JU2PF2	Photography	Captured with RUVIS using Polilight (350nm) and orange filter. Photographed after both dye stains were applied.
K4HWRV	Photography Lifting	DCS 4 System with Yellow filter. Printed 1:1 Placed onto white lift card and marked as a duplicate.
K4KJ7N	Photography	Once the latent print appeared, I photographed same using my Nikon D5600, scaled and appropriate filter. Print appeared on disc "B"
K6DFTV	Photography	Photography of the mark after every step of examination
KE6P6D	Photography Lifting	Initial photos, Photos after R6G with ALS 515nm/orange filter (TIF, MACRO), Photos after black powder (TIF, MACRO) Tape lift onto lift card

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
KQKHZE	Photography	photographs of ridge structure on item 3B taken after initial labkam, labkam after cyanoacrylate fuming, and polilight after dye stain.
KXCZ7B	Photography	The latent print was photographed with a metric scale.
	Lifting	I lifted the developed print with lifting tape and placed it on a latent print lift card.
KZK7RC	Photography	THE LATENT FINGERPRINT ON A DISC OF UNTREATED METAL WAS PHOTOGRAPHED 1 TO 1 USING AN L SCALE RULER.
	Lifting	THE FINGERPRINT ON THE UNTREATED METAL WAS NEXT LIFTED WITH A FINGERPRINT HINGE LIFTER AND PLACED ON A LATENT IMPRESSION CARD WITH AND ALL THE PERTINENT INFORMATION DOCUMENTED ON THE LATENT IMPRESSION CARD. BOTH THE PHOTOGRAPH AND THE FINGERPRINT IMPRESSION CARD WITH THE LIFT WAS PLACED ON A PROPERTY RECEIPT AND SUBMITTED TO THE [Laboratory] LATENT PRINT UNIT TO BE COMPARED TO ANY SUSPECTS, OTHER RELATED INVESTIGATIONS AND ENTERED INTO "AFIS" FOR FURTHER EVALUATION.
L2UKQ6	Photography	Photographed an MBD dye stain latent print found on item #3B.
	Lifting	Lifted same latent print after it had been powder processed; the lifted print was much clearer than the MBD photograph.
L83VQC	Photography	
	Lifting	
LFFDFH	Photography	Foster & Freeman DCS-4 used to record positive and improved development
LG8TQ9	Photography	16MP RUVIS, 254 nm UV lamp, 78.0 mm focal length, exposure 0.9 sec
LJAX29	Photography	Photographed after Lumicyano using the ALS (UV wavelength)
LM96M7	Lifting	Nikon D800 + orange filter and macro lens
LMFVTA	Lifting	One latent lift card was prepared.
LPGG68	Photography	
LPZ43P	Photography	Nikon D750, Nikkor 60 mm Macro

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
LWLH2A	Lifting	Use of adhesive tape to lift/remove print from surface and placed tape on lift card
LZKZY2	Photography	
M27L7C	Photography	Photographed.
M3LFP4	Lifting	
M6B4CK	Photography	Photos of latent labeled MLP2 observed on disk "B" taken prior to processing using ALS and post cyanoacrylate fuming/dusting with black fingerprint powder. Clear ridge detail in photo, no lift needed.
M7KUB9	Lifting	I used lifting tape to lift the print and placed it on a lift card to preserve the print.
MCQ3K6	Photography	TM 3B.1 in B section. White light is used (400-700 Nm) to photograph the developed latent print (partial as well as detail)
MEWXG8	Photography Lifting	digital image and latent lift Labeled 3BL1. Secured as Item #HFIU1.
MLD2BA	Photography	Scaled photographs with macro lens
MPCEWE	Photography Lifting	Using suitable light and DCS 5 photography system Using clear lift
MQPE79	Photography	Photographed L2 (after R6G dye stain with laser light) - back of disc Item 3B with scale
MR6RU6	Photography	
MV3DKM	Photography	1 image taken with Camera using diffused fluorescent lighting, impression found on disc B
MYHA87	Photography	
MYJWUC	Photography	
MZVX8X	Photography	Photographs were taken to preserve the latent print.
N3YNGY	Photography	Captured via photography after RAM (using orange filter) and after Powder

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
NAZ2EG	Lifting	Observed print was lifted using latent print tape, then applied to back of latent print card.
NCMM6H	Photography	Photographed with ALS after R6G. The latent print did not meet our suitability standards so it was not photographed for comparison purposes. There was insufficient ridge detail.
	Lifting	Lifted after magnetic powder.
NFLX2H	Photography	Photographed with ALS after R6G; Insufficient Ridge Detail. Latent print did not meet our suitability standards so not photographed for comparison purposes.
	Lifting	Lifted after magnetic powder
NJJMF6	Lifting	
	Photography	
NZ9P3Z	Photography	Canon EOS Rebel T6i Camera
P2NU8W	Photography	1 photo of item 3B was taken on Camera 3/Lens 3.
P63M4G	Photography	Sample "B" was photographed using Camera 3/Lens 3 in the Crime Scene Unit after dusting with black powder. One (1) photograph was taken using direct lighting.
	Lifting	One (1) tape lift of the print on sample "B" was taken using clear in color lift tape and placed on a white in color latent print lift card marked with identifying information.
P7BAMB	Photography	Wave length 254nm using Reflected UV
PECPPH	Scanning	Friction ridges were observed on item 3B. Item 3B was scanned using the Epson Scanner 13 with the appropriate settings. A photo card with a scale, the case number, date, processing method, item number and my initialed was placed next to the item.
PKA6WW	Photography	
PKEHH8	Photography	Friction ridge impression on sample B photographed using oblique lighting.
	Lifting	Friction ridge impression on sample B lifted using lift tape and placed on backing card.
PLNBA7	Lifting	lifted the print using clear tape and a print card.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
PM8UHJ	Photography	Photography of print observed during the RAY process was completed with Camera 3/Lens 3 and the use of a Polilight Flare+ 2 (450nm light) with a Promaster Orange YA2 filter and direct lighting. 1 image recovered.
	Scanning	Preservation of print observed with black powder was completed with Scanner 13. 1 image recovered.
PNB7YE	Photography	We use photography to preserve the visualized prints.
PNFB93	Lifting	The print was lifted from item B with lifting tape.
PP7RR7	Photography	Photographed after visual examination with blue light and yellow filter.
	Documentation	The print is drawn up with a marker pen and photographed on the metal item to show where the print is located.
PQD9KA	Photography	Any suitable marks developed throughout sequential treatment were marked up and photographed 1:1 using a D810 Nikon digital camera with an AF-5 micro nikkor 105mm lens, 8x4 Crime Lite light source(s) and appropriate camera filter(s). The camera is linked to DCS5 (Digital Capture System 5) software where the images are exhibited with full audit trails and further DCS5 enhancement tools can be used to improve contrast/remove background interference where applicable. Exhibited images then submitted to the Fingerprint Bureau for further analysis and comparison.
PQJJGF	Photography	DISC B labelled '19-5190 ITEM 3 A CL', photographed using Green 532nm Laser. Image converted to Black & White using Adobe CS4 Photoshop, as would be presented to Fingerprint Officers to enable comparison.
PQZF7U	Photography	The fingerprint in section B was photographed.
QAPDMD	Photography	Capture by DCS4 Fingerprint Enhancement System. (Foster+Freeman)
	Lifting	Lifted by adhesive tape.
QDRDHW	[No Methods Reported.]	No method was used as no latent print development occurred.
QVWCG8	Lifting	
QXXM6U	Photography	The latent print was photographed using a macro lens and a scale utilizing a blue light at an oblique angle with an orange filter.
R37679	[No Methods Reported.]	AFTER CNA REPACKAGED IN ORIGINAL ENVELOPE AFTER BY40 DRIED AND THEN REPACKAGED IN ENVELOPE FOR IMAGING

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
R9YQ9A	Photography	All items were photographed. Ex 3 was photo at each step, with and without a scale. Ex 3B was photo with ALS with macro lens on tripod and then again after powder development under TIFF setting for preservation/examination.
	Lifting	Ex 3B was lifted with tape and placed on a card to be submitted for preservation/examination.
RA88YR	Photography	Dye Stain: One (1) digital image taken with camera/lens three on June 28, 2019 using Rofin Polilight FLARE Plus 2(450nm filter) with ProMaster Orange YA2 camera filter. See image metadata for settings. (Disc B)
	Scanning	Powder Dusting: Two (2) digital images taken with scanner thirteen on July 3, 2019. See image metadata for settings. (Disc B)
RRPPUT	Photography	450nm photography of the Ridge detail before cyanocrylate application. After cyanocrylate application we used white light. Then after Ardrox dye, we used forensic light between 360nm-490nm range for the visualization. Use a càmera lens filter for the photography.
T9PV3M	Photography	I used QIMAGING MICROPUBLISHER 5.0 and Full Spectrum Imagine Sytem (FSIS) to take digital photographs of the latent impression on the reverse side of round metal disc labeled B.
TAJHFQ	Photography	
TCRN4D	Photography	DCS, pictures taken in white lite after cyanoacryate fuming then in the light 430-515 nm through orange filter (using DCS-3)
THG7F4	Photography	Photography method same as Item 2- photographed after dye stain & black powder steps.
	Lifting	Ridge detail lifted using gelatin lifter. Protective cover placed after lifting process.
TKKWN4	Lifting	
	Scanning	
TXU83Y	Lifting	Latent lift lifted from disc "B"
U4W72A	Photography	After cyanoacrylate fuming, I obtained a digital image using the LABKAM UV camera.
U6JUBP	Photography	
UDG6GY	Photography	DCS4 workstation was used to obtain photographs
	Lifting	

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
UEBAY8	Photography	Canon EOS 5 D Mark II, f/6.3, 5s shutter time, ISO-100. 100mm macro lens and UV light at 350-380 nm
UKDH6Z	Photography	
UM2QU4	Photography	DIGITAL PHOTOGRAPHS W/ SCALE
	Lifting	LIFT WITH TAPE
UR3PC9	Photography	
URHD89	Photography	(Yellow Filter)
UU4FCE	Photography	Camera 3/lens 3. Ray: Direct lighting with polilight 2 and orange filter. Powder: Bounce photos with flood lighting. 1 Ray photo and 1 powder photo submitted for item 3B.
UUL4F9	Photography	With a Nikon D5
UULCV2	Lifting	Lifting, Photography
UWC6LW	Photography	Initial ALS observation was photographed using blue/green light and orange filter with Nikon D610. Photo was also taken after CAE and R6G was applied using blue/green light and orange filter with Nikon D610.
	Lifting	Lifting tape was used to transfer black powder print onto white lift card from disc B.
UXLWTT	Photography	Captured after ALS @ 415nm and 430nm. Captured after Cyanoacrylate fuming. Also captured after R.A.M. application at 515nm.
VDCLY9	Photography	Using DCS-5 system: The fingerprint was checked and photographed after every method. 1- Visual Examination, 2- ALS Examination, 3- Cyanoacrylate Feuming process, 4- UV Examination, 5- Black Powder, 6- Gellifter. Best result was after Powder dusting.
	Lifting	The ridge detail was lifted BY using White GelLifter.
VDYRLU	Photography	Photographed LASER - Inherent Luminescence and CA fuming-Rhodamine ridge detail
VMZGW4	Lifting	The fingerprint fragment found on disk B is lifted with tape and placed on a white support.
	Photography	
VUJD87	[No Methods Reported.]	Picture of print captured.

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
VUZBCV	Photography	
VVVXNY	Photography	Captured the print at 1000 dip or greater.
	Lifting	2 inch tape was used to lift the print. (first lift); Mikrosil was used to lift the print. (second lift)
VWP9JV	Photography	Nikon D610, lens Nikon AF Micro Nikkor 60 mm.
VZLRPZ	Photography	Photographed developed print with scale.
	Lifting	Lifted with print using fingerprint tape and fingerprint card.
W86QW7	Photography	
WCELJA	Lifting	
	Scanning	Color .TIFF 1200 dpi
WEMJB6	Photography	Using suitable Light and DCS 5 photography system
	Lifting	Using clear lift
WLQ7Y6	Photography	Photo taken of powder print on Item 3B. Direct Overhead lighting with camera 9 lens 2. 1 image saved.
	Photography	Photo taken of RAY print on Item 3B, camera 9 lens 2 with orange filter and polilight flare plus 2 450 blue filter. 1 image saved.
WR7DF4	Photography	Light source blue light.
WUZKXZ	Photography	Photographed following R6G using LASER at 532nm with orange barrier and also utilized A-FF-1 filter for an additional photograph. Ambient lighting used to photograph following powder processing
WVALJY	Photography	
WVBDXU	Photography	Print and overall images
WY9KWR	Photography	Previewed in Foster Freemsn DCS-5; Photographed
WZL8CJ	Photography	DCS5, White light
XFALAP	Photography	

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
XXG2TQ	Photography	After processing with R6G MeOH, captured digital images using both an orange filter and an A-FF-1 filter.
XYQNBJ	Photography	
Y2TMX3	Photography	One image was taken with a Nikon D810 using diffused fluorescent lighting.
Y3JXPV	Photography	Photo - On Visual Exam using ALS 415nm with yellow filter. Photo - After Lumicyano using ALS 475nm with orange filter. Photo - After Rhodamine using ALS 495nm with orange filter. Photo - After Black fingerprint powder
	Lifting	Hinge lift
	Photography	Photo of hinge lift
YJMWN7	Lifting	Lift 1 - Item 3B - backside of metal type "coin B"
YK7JMN	Lifting	Black powder, clear tape, white card
Z3GR2T	Photography	"P-001" was photographed using a Nikon D700 camera. The possible suitable latent was photographed under white light prior to additional processing, photographed again under white light following cyanoacrylate fuming, and photographed after applying Rhodamine-6G, with a TracER LASER and orange barrier filter over the lens.
Z3V97U	Photography	Camera: Canon 60D. Light source: Foster & Freeman UV 350-380nm.
Z4B4R8	Scanning	Direct LED white light
Z94CTT	Photography	Digital
ZA2ZGD	Photography	
ZAWK2R	Photography	The fingerprint was photographed at every stage of research after disclosure.
ZEVW74	Photography	Canon EOS 60D, 100 mm lens.
	CD-R	Recording photos on a CD-R disc.
ZJL7F3	Photography	Using suitable light and DCS 5 photography system
	Lifting	Using clear lift
ZLAKXK	Photography	White light and forensic light 450nm

TABLE 3 - Item 3

WebCode	Preservation Methods	Method Details
ZMMCTM	Photography	Photographs taken of observed ridge detail, Tab B.
ZQ3Y7R	Lifting	tape lifted latent print

Response Summary

Participants: 245

Methods Utilized

Lifting	85
Photography	202
Scanning	12

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

First-Level Detail Findings

TABLE 4 - Item 1

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
		Arch	Loop Whorl			Arch	Loop Whorl
239ENG	Not Suitable			3ZK69N	Not Suitable		
26ZBDB	Not Suitable			473XWT	Not Suitable		
28T3R3	N/A			49ZML2	N/A		
28UHV8	N/A			49ZP9K	N/A		
2BAMCW	N/A			4AM3FN		✓	
2KCPU9				4APPW3	N/A		
2T6MCM	Not Suitable			4HWDLU	Not Suitable		
2UF84Q	N/A			4KB2JT	Not Suitable		
2W77JA	N/A			4QUHUH	N/A		
2WP89X	Not Suitable			4RRAUQ	N/A		
2ZPQJP	N/A			4UV3L4	Not Suitable		
39TWFX		✓		629FZT		✓	✓
3DU74Y	N/A			63PT3P	N/A		
3KCRYN	N/A			6BZADW	Not Suitable		
3T3U2E	Not Suitable			6FLQNF	Not Suitable		
3UV9HH	N/A			6MUQ3W	N/A		
3UWHLV	N/A			6TVK4Y		✓	
3XFF8Z			✓	6WW8YN	Not Suitable		

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
6XPGTP	Not Suitable				8UMKDZ	N/A			
6XU4EQ	Not Suitable				8WRRJT	N/A			
6YQH7P	N/A				8WT74L	N/A			
6ZW4FN	N/A				8X4RTM	N/A			
73EDUL	N/A				983NTP	N/A			
76LDCL		✓	✓		987M9X	N/A			
7FLBNN					9DVGFQ	Not Suitable			
7LUTPF	N/A				9FWRZT		✓	✓	✓
7P98WG	Not Suitable				9HQWWR	Not Suitable			
7PP9WX	Not Suitable				9JXVUZ		✓		
7R2VGX	Not Suitable				9U36XX	Not Suitable			
7XMT6K	Not Suitable				ABJ7U8		✓	✓	
839ARU	N/A				AFRU6M			✓	✓
83E4PN	N/A				AG7WEG	Not Suitable			
8B6ZGC	Not Suitable				AJWNJD	N/A			
8DXW76	Not Suitable				ALGAVF	N/A			
8DZ8WM	Not Suitable				AN7KQE	Not Suitable			
8LA4NU			✓		ANLYYN			✓	
8REWUJ	N/A				APZ6Y6		✓		

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
AR8J8Y	N/A				CPAVWG	N/A			
AY6E2Q		✓			CQ9GTY	N/A			
B2P7LD	N/A				CYXQXH	N/A			
B2QU9H	Not Suitable				D3FN36	Not Suitable			
B3LGPT	Not Suitable				D62QQP	N/A			
B3LJCC	N/A				D8RRWD	N/A			
B6N4WK		✓	✓		DHMMQG	Not Suitable			
B7GRJM		✓			DJKN2E	Not Suitable			
B9QTL7		✓	✓		DKVPND	Not Suitable			
BQNHTF	N/A				DPM2GP	Not Suitable			
BWHUX8	Not Suitable				DQHM4N		✓	✓	
C2A6HB		✓	✓		DWQ4LP		✓	✓	
C47AWB		✓			E6GQ9E	Not Suitable			
C4BP9B	Not Suitable				EEK47U			✓	✓
C7X9CU	Not Suitable				EMV3Z6	N/A			
C88VKD	N/A				EP3KY2			✓	
CA4KGB	Not Suitable				EWNDCL	Not Suitable			
CFNP63		✓			EZNP9L	Not Suitable			
CJM3TU	Not Suitable				F3MZGC	N/A			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
F9UVF9	N/A				HTUQ8M				
FG83XX	Not Suitable				HUK84G	N/A			
FP28QY	Not Suitable				HUPUWA	N/A			
FRTMGF	N/A				HVD6BN	Not Suitable			
FWHKRJ		✓	✓	✓	HVKFJ9	N/A			
G4XLN8					J2NY3J	Not Suitable			
G73WD2	Not Suitable				J6Z9BB	N/A			
G8EC82					JB8U3E	N/A			
GBDAJ9	Not Suitable				JCF28R	Not Suitable			
GHELE7					JDWECA	N/A			
GLBBVD					JDXV92	Not Suitable			
GMRXDD	N/A				JEM82F		✓		
GR7FUU	N/A				JHRBU9	Not Suitable			
GWWQ38	N/A				JLPWH6	Not Suitable			
H6N8WN			✓		JU2PF2	Not Suitable			
H9PTLR	N/A				K4HWRV	N/A			
HAJH4M	N/A				K4KJ7N	Not Suitable			
HDF948	N/A				K6DFTV		✓	✓	
HDGFHF	N/A				KE6P6D	Not Suitable			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
KEKYA8	Not Suitable				MCQ3K6	Not Suitable			
KQKHZE	N/A				MEWXG8	Not Suitable			
KXCZ7B	Not Suitable				MLD2BA	Not Suitable			
KZK7RC	N/A				MPCEWE	Not Suitable			
L2UKQ6	N/A				MQPE79	Not Suitable			
L83VQC		✓			MR6RU6	N/A			
LFFDFH	Not Suitable				MV3DKM	Not Suitable			
LG8TQ9	Not Suitable				MYHA87	N/A			
LJAX29	N/A				MYJWUC	Not Suitable			
LM96M7	N/A				MZVX8X	Not Suitable			
LMFVTA	N/A				N3YNGY	Not Suitable			
LPGG68	Not Suitable				NAZ2EG	N/A			
LPZ43P		✓	✓		NCMM6H	N/A			
LWLH2A	N/A				NFLX2H	N/A			
LZKZY2	Not Suitable				NJJMF6	N/A			
M27L7C	N/A				NKDBWE	Not Suitable			
M3LFP4					NZ9P3Z	Not Suitable			
M6B4CK	Not Suitable				P2NU8W	N/A			
M7KUB9	Not Suitable				P63M4G	N/A			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
P7BAMB		✓			R9YQ9A				
PECPPH	N/A				RA88YR	N/A			
PKA6WW	N/A				RGALXV	Not Suitable			
PKEHH8	Not Suitable				RRPPUT	Not Suitable			
PLNBA7	N/A				T9PV3M	Not Suitable			
PM8UHJ	N/A				TAJHFQ	Not Suitable			
PNB7YE	N/A				TCRN4D			✓	
PNFB93	N/A				THG7F4	N/A			
PP7RR7		✓			TKKWN4	Not Suitable			
PQD9KA	Not Suitable				TXU83Y	Not Suitable			
PQJJGF			✓		U4W72A	N/A			
PQZF7U					U6JUBP	N/A			
Q6YUTA	N/A				UDG6GY	N/A			
QAPDMD		✓			UEBAY8			✓	
QDRDHW	N/A				UKDH6Z				
QVWCG8	Not Suitable				UM2QU4	Not Suitable			
QXXM6U	Not Suitable				UNWD9R	N/A			
QYMXX9			✓	✓	UR3PC9	Not Suitable			
R37679		✓			URHD89	Not Suitable			

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
UU4FCE	N/A				WVALJY		✓	✓	
UUL4F9		✓			WVBDXU				
UULCV2	Not Suitable				WY9KWR		✓		
UWC6LW	Not Suitable				WZL8CJ		✓		
UXLWTT		✓	✓		XFALAP	N/A			
VDCLY9	Not Suitable				XK83P6			✓	
VDYRLU	N/A				XXG2TQ		✓	✓	
VMZGW4	Not Suitable				XYQNBJ	N/A			
VUJD87	N/A				Y2TMX3	Not Suitable			
VUZBCV	N/A				Y339GW	Not Suitable			
VVVXNY	N/A				Y3JXPV	Not Suitable			
VWP9JV	Not Suitable				YEEKNY		✓	✓	
VZLRPZ	Not Suitable				YJMWN7		✓	✓	
W86QW7	Not Suitable				YK7JMN	N/A			
WCELJA	N/A				Z3GR2T	Not Suitable			
WEMJB6	Not Suitable				Z3V97U			✓	
WLQ7Y6	N/A				Z4B4R8	N/A			
WR7DF4	Not Suitable				Z94CTT	Not Suitable			
WUZKXZ		✓	✓		ZA2ZGD		✓		

TABLE 4 - Item 1

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode	First Level Pattern(s)? Arch	Loop	Whorl
ZAWK2R	Not Suitable							
ZEVW74		✓	✓					
ZJL7F3	Not Suitable							
ZLAKXK			✓					
ZMMCTM	Not Suitable							
ZQ3Y7R	N/A							

Findings Summary Total Participants: 270

1st Level	Arch	Loop	Whorl	Not Suitable	N/A
Total	37	33	6	104	102

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

TABLE 4 - Item 2

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
239ENG		✓		473XWT	✓	✓	
26ZBDB	Not Suitable			49ZML2	N/A		
28T3R3	N/A			49ZP9K	N/A		
28UHV8	N/A			4AM3FN	✓		
2BAMCW	N/A			4APPW3	N/A		
2KCPU9	✓			4HWDLU	Not Suitable		
2T6MCM	✓	✓		4KB2JT		✓	
2UF84Q	N/A			4QUHUH	N/A		
2W77JA	✓			4RRAUQ	N/A		
2WP89X	✓	✓		4UV3L4	Not Suitable		
2ZPQJP	N/A			629FZT	✓	✓	
39TWFX	✓	✓		63PT3P	N/A		
3DU74Y	N/A			6BZADW	✓	✓	
3KCRYN	N/A			6FLQNF			
3T3U2E	✓	✓		6MUQ3W	Not Suitable		
3UV9HH	N/A			6TVK4Y	Not Suitable		
3UWHLV	N/A			6WW8YN	Not Suitable		
3XFF8Z	✓	✓		6XPGTP	Not Suitable		
3ZK69N	Not Suitable			6XU4EQ	Not Suitable		

TABLE 4 - Item 2

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
6YQH7P	N/A				8WT74L	N/A			
6ZW4FN	N/A				8X4RTM	N/A			
73EDUL	Not Suitable				983NTP	N/A			
76LDCL	Not Suitable				987M9X	N/A			
7FLBNN					9DVGFQ			✓	
7LUTPF	N/A				9FWRZT		✓	✓	✓
7P98WG	Not Suitable				9HQWWR	Not Suitable			
7PP9WX		✓			9JXVUZ	N/A			
7R2VGX	Not Suitable				9U36XX	Not Suitable			
7XMT6K		✓			ABJ7U8		✓	✓	
839ARU					AFRU6M		✓	✓	
83E4PN	N/A				AG7WEG	Not Suitable			
8B6ZGC	Not Suitable				AJWNJD	N/A			
8DXW76		✓	✓		ALGAVF	N/A			
8DZ8WM	Not Suitable				AN7KQE		✓	✓	
8LA4NU	Not Suitable				ANLYYN			✓	
8REWUJ	N/A				APZ6Y6	Not Suitable			
8UMKDZ	N/A				AR8J8Y				
8WRRJT	Not Suitable				AY6E2Q			✓	✓

TABLE 4 - Item 2

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
B2P7LD	N/A				CYXQXH	N/A			
B2QU9H			✓		D3FN36	Not Suitable			
B3LGPT		✓	✓		D62QQP	N/A			
B3LJCC	N/A				D8RRWD	N/A			
B6N4WK	Not Suitable				DHMMQG		✓		
B7GRJM		✓	✓		DJKN2E		✓	✓	
B9QTL7	Not Suitable				DKVPND	Not Suitable			
BQNHTF	N/A				DPM2GP	Not Suitable			
BWHUX8	Not Suitable				DQHM4N		✓	✓	✓
C2A6HB		✓			DWQ4LP				
C47AWB		✓			E6GQ9E	Not Suitable			
C4BP9B		✓			EEK47U	Not Suitable			
C7X9CU	Not Suitable				EMV3Z6	N/A			
C88VKD	N/A				EP3KY2		✓	✓	
CA4KGB	Not Suitable				EWNDCL	N/A			
CFNP63			✓		EZNP9L	N/A			
CJM3TU		✓	✓		F3MZGC				
CPAVWG	N/A				F9UVF9	N/A			
CQ9GTY	N/A				FG83XX	Not Suitable			

TABLE 4 - Item 2

WebCode		First Level Pattern(s)? Arch	Loop	Whorl
FP28QY		✓	✓	
FRTMGF	N/A			
FWHKRJ		✓	✓	✓
G4XLN8			✓	
G73WD2	Not Suitable			
G8EC82	Not Suitable			
GBDAJ9		✓		
GHELE7	N/A			
GLBBVD				
GMRXDD	N/A			
GR7FUU	N/A			
GWWQ38	N/A			
H6N8WN	N/A			
H9PTLR	N/A			
HAJH4M	N/A			
HDF948	N/A			
HDGFHF	N/A			
HTUQ8M	Not Suitable			
HUK84G	N/A			
HUPUWA	N/A			
HVD6BN	Not Suitable			
HVKFJ9	N/A			
J2NY3J	Not Suitable			
J6Z9BB	N/A			
JB8U3E	N/A			
JCF28R	Not Suitable			
JDWECA	N/A			
JDXV92	Not Suitable			
JEM82F		✓	✓	
JHRBU9		✓	✓	
JLPWH6	Not Suitable			
JU2PF2	Not Suitable			
K4HWRV	N/A			
K4KJ7N	Not Suitable			
K6DFTV		✓	✓	
KE6P6D	Not Suitable			
KEKYA8	Not Suitable			
KQKHZE	N/A			

TABLE 4 - Item 2

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
KXCZ7B		✓			MLD2BA	Not Suitable			
KZK7RC	N/A				MPCEWE	N/A			
L2UKQ6	Not Suitable				MQPE79		✓	✓	
L83VQC	Not Suitable				MR6RU6	N/A			
LFFDFH	Not Suitable				MV3DKM	Not Suitable			
LG8TQ9		✓	✓		MYHA87	N/A			
LJAX29	N/A				MYJWUC	Not Suitable			
LM96M7	N/A				MZVX8X	Not Suitable			
LMFVTA	N/A				N3YNGY	Not Suitable			
LPGG68	Not Suitable				NAZ2EG	N/A			
LPZ43P		✓			NCMM6H	N/A			
LWLH2A	N/A				NFLX2H	N/A			
LZKZY2		✓	✓		NJJMF6	N/A			
M27L7C	N/A				NKDBWE		✓		
M3LFP4					NZ9P3Z		✓	✓	
M6B4CK		✓	✓		P2NU8W	N/A			
M7KUB9	Not Suitable				P63M4G	N/A			
MCQ3K6		✓			P7BAMB	N/A			
MEWXG8			✓		PECPPH	N/A			

TABLE 4 - Item 2

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
PKA6WW	N/A				RGALXV	Not Suitable			
PKEHH8			✓		RRPPUT		✓		
PLNBA7	N/A				T9PV3M	Not Suitable			
PM8UHJ	N/A				TAJHFQ		✓		
PNB7YE	N/A				TCRN4D				
PNFB93	N/A				THG7F4	N/A			
PP7RR7	Not Suitable				TKKWN4	Not Suitable			
PQD9KA	Not Suitable				TXU83Y	Not Suitable			
PQJJGF	Not Suitable				U4W72A	N/A			
PQZF7U		✓			U6JUBP	N/A			
Q6YUTA	N/A				UDG6GY	N/A			
QAPDMD		✓	✓		UEBAY8		✓		
QDRDHW		✓			UKDH6Z				
QVWCG8	Not Suitable				UM2QU4	N/A			
QXXM6U	Not Suitable				UNWD9R	N/A			
QYMXX9		✓			UR3PC9	Not Suitable			
R37679	Not Suitable				URHD89	Not Suitable			
R9YQ9A					UU4FCE	N/A			
RA88YR	N/A				UUL4F9	Not Suitable			

TABLE 4 - Item 2

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
UULCV2	Not Suitable				WY9KWR		✓	✓	
UWC6LW	Not Suitable				WZL8CJ			✓	
UXLWTT		✓	✓		XFALAP	N/A			
VDCLY9	Not Suitable				XK83P6		✓	✓	✓
VDYRLU	N/A				XXG2TQ	Not Suitable			
VMZGW4	Not Suitable				XYQNBJ	N/A			
VUJD87	N/A				Y2TMX3	Not Suitable			
VUZBCV	N/A				Y339GW	Not Suitable			
VVVXNY	N/A				Y3JXPV	Not Suitable			
VWP9JV	Not Suitable				YEEKNY		✓	✓	✓
VZLRPZ			✓		YJMWN7		✓	✓	
W86QW7	Not Suitable				YK7JMN	N/A			
WCELJA	N/A				Z3GR2T		✓		
WEMJB6	N/A				Z3V97U	Not Suitable			
WLQ7Y6	N/A				Z4B4R8	N/A			
WR7DF4		✓			Z94CTT		✓	✓	
WUZKXZ		✓			ZA2ZGD				✓
WVALJY	Not Suitable				ZAWK2R		✓		
WVBDXU					ZEVW74		✓	✓	

TABLE 4 - Item 2

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode	First Level Pattern(s)? Arch	Loop	Whorl
ZJL7F3	N/A							
ZLAKXK		✓						
ZMMCTM	Not Suitable							
ZQ3Y7R	N/A							

Findings Summary Total Participants: 270

1st Level	Arch	Loop	Whorl	Not Suitable	N/A
Total	62	49	7	80	103

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

TABLE 4 - Item 3

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
239ENG			✓		473XWT			✓	
26ZBDB			✓		49ZML2			✓	
28T3R3	N/A				49ZP9K	N/A			
28UHV8			✓		4AM3FN			✓	
2BAMCW	N/A				4APPW3	N/A			
2KCPU9					4HWDLU			✓	
2T6MCM			✓	✓	4KB2JT			✓	
2UF84Q	N/A				4QUHUH	N/A			
2W77JA			✓		4RRAUQ	N/A			
2WP89X			✓		4UV3L4			✓	
2ZPQJP	N/A				629FZT			✓	✓
39TWFX			✓		63PT3P	N/A			
3DU74Y	N/A				6BZADW			✓	
3KCRYN	N/A				6FLQNF			✓	
3T3U2E			✓		6MUQ3W	Not Suitable			
3UV9HH	N/A				6TVK4Y			✓	
3UWHLV	N/A				6WW8YN			✓	
3XFF8Z			✓		6XPGTP			✓	
3ZK69N			✓		6XU4EQ			✓	

TABLE 4 - Item 3

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
6YQH7P	N/A				8WT74L	N/A			
6ZW4FN	N/A				8X4RTM	N/A			
73EDUL			✓		983NTP	N/A			
76LDCL	Not Suitable				987M9X	N/A			
7FLBNN					9DVGFQ			✓	
7LUTPF	N/A				9FWRZT			✓	
7P98WG			✓		9HQWWR			✓	
7PP9WX			✓		9JXVUZ			✓	
7R2VGX			✓		9U36XX			✓	
7XMT6K			✓		ABJ7U8			✓	
839ARU	N/A				AFRU6M			✓	
83E4PN	N/A				AG7WEG			✓	
8B6ZGC			✓		AJWNJD	N/A			
8DXW76			✓		ALGAVF	N/A			
8DZ8WM			✓	✓	AN7KQE			✓	
8LA4NU			✓		ANLYYN			✓	
8REWUJ	N/A				APZ6Y6			✓	
8UMKDZ	N/A				AR8J8Y			✓	
8WRRJT			✓		AY6E2Q			✓	

TABLE 4 - Item 3

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
B2P7LD	N/A				CYXQXH	N/A			
B2QU9H			✓		D3FN36			✓	
B3LGPT			✓		D62QQP	N/A			
B3LJCC	N/A				D8RRWD	N/A			
B6N4WK			✓		DHMMQG			✓	
B7GRJM			✓		DJKN2E			✓	
B9QTL7	Not Suitable				DKVPND	N/A			
BQNHTF	N/A				DPM2GP			✓	
BWHUX8			✓		DQHM4N			✓	
C2A6HB			✓		DWQ4LP			✓	
C47AWB			✓		E6GQ9E	Not Suitable			
C4BP9B			✓		EEK47U			✓	✓
C7X9CU			✓		EMV3Z6	N/A			
C88VKD	N/A				EP3KY2			✓	
CA4KGB			✓		EWNDCL			✓	
CFNP63			✓		EZNP9L			✓	
CJM3TU			✓		F3MZGC	N/A			
CPAVWG	N/A				F9UVF9	Not Suitable			
CQ9GTY	N/A				FG83XX			✓	

TABLE 4 - Item 3

WebCode	First Level Pattern(s)?			WebCode	First Level Pattern(s)?		
	Arch	Loop	Whorl		Arch	Loop	Whorl
FP28QY		✓		HUPUWA	N/A		
FRTMGF	N/A			HVD6BN		✓	
FWHKRJ		✓		HVKFJ9	N/A		
G4XLN8		✓		J2NY3J		✓	
G73WD2	Not Suitable			J6Z9BB	N/A		
G8EC82				JB8U3E		✓	
GBDAJ9		✓		JCF28R		✓	
GHELE7	N/A			JDWECA	N/A		
GLBBVD				JDXV92		✓	
GMRXDD	N/A			JEM82F		✓	
GR7FUU	N/A			JHRBU9		✓	
GWWQ38	N/A			JLPWH6		✓	
H6N8WN		✓		JU2PF2		✓	
H9PTLR	N/A			K4HWRV	N/A		
HAJH4M	N/A			K4KJ7N		✓	
HDF948	N/A			K6DFTV		✓	
HDGFHF	N/A			KE6P6D		✓	
HTUQ8M		✓		KEKYA8	Not Suitable		
HUK84G	N/A			KQKHZE	N/A		

TABLE 4 - Item 3

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
KXCZ7B			✓		MLD2BA			✓	
KZK7RC	N/A				MPCEWE			✓	
L2UKQ6			✓		MQPE79			✓	
L83VQC			✓		MR6RU6	N/A			
LFFDFH			✓		MV3DKM			✓	
LG8TQ9			✓		MYHA87	N/A			
LJAX29	N/A				MYJWUC			✓	
LM96M7	N/A				MZVX8X			✓	
LMFVTA	N/A				N3YNGY			✓	
LPGG68			✓		NAZ2EG	N/A			
LPZ43P			✓		NCMM6H	N/A			
LWLH2A	N/A				NFLX2H	N/A			
LZKZY2			✓		NJJMF6	N/A			
M27L7C	N/A				NKDBWE			✓	
M3LFP4			✓		NZ9P3Z			✓	
M6B4CK			✓		P2NU8W	N/A			
M7KUB9			✓		P63M4G	N/A			
MCQ3K6			✓		P7BAMB	N/A			
MEWXG8			✓		PECPPH	N/A			

TABLE 4 - Item 3

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
PKA6WW	N/A				RGALXV	Not Suitable			
PKEHH8			✓		RRPPUT			✓	
PLNBA7	N/A				T9PV3M			✓	
PM8UHJ	N/A				TAJHFQ			✓	
PNB7YE	N/A				TCRN4D			✓	
PNFB93	N/A				THG7F4	N/A			
PP7RR7			✓		TKKWN4			✓	
PQD9KA			✓		TXU83Y			✓	
PQJJGF			✓		U4W72A	N/A			
PQZF7U			✓		U6JUBP	N/A			
Q6YUTA	N/A				UDG6GY	N/A			
QAPDMD			✓		UEBAY8			✓	
QDRDHW	N/A				UKDH6Z				
QVWCG8			✓		UM2QU4	N/A			
QXXM6U	Not Suitable				UNWD9R	N/A			
QYMXX9			✓	✓	UR3PC9			✓	
R37679			✓		URHD89			✓	
R9YQ9A	N/A				UU4FCE	N/A			
RA88YR	N/A				UUL4F9			✓	

TABLE 4 - Item 3

WebCode		First Level Pattern(s)? Arch	Loop	Whorl	WebCode		First Level Pattern(s)? Arch	Loop	Whorl
UULCV2			✓		WY9KWR			✓	
UWC6LW	N/A				WZL8CJ			✓	
UXLWTT			✓		XFALAP	N/A			
VDCLY9			✓		XK83P6			✓	
VDYRLU	N/A				XXG2TQ			✓	✓
VMZGW4			✓		XYQNBJ	N/A			
VUJD87	N/A				Y2TMX3	Not Suitable			
VUZBCV	N/A				Y339GW	Not Suitable			
VVVXNY	N/A				Y3JXPV			✓	
VWP9JV			✓		YEEKNY			✓	
VZLRPZ			✓		YJMWN7			✓	
W86QW7			✓		YK7JMN	N/A			
WCELJA	N/A				Z3GR2T			✓	
WEMJB6			✓		Z3V97U			✓	
WLQ7Y6	N/A				Z4B4R8	N/A			
WR7DF4			✓		Z94CTT			✓	
WUZKXZ			✓		ZA2ZGD			✓	
WVALJY			✓	✓	ZAWK2R			✓	
WVBDXU	N/A				ZEVW74			✓	

TABLE 4 - Item 3

WebCode	First Level Pattern(s)? Arch	Loop	Whorl	WebCode	First Level Pattern(s)? Arch	Loop	Whorl
ZJL7F3		✓					
ZLAKXK		✓					
ZMMCTM		✓					
ZQ3Y7R N/A							

Findings Summary Total Participants: 270

1st Level	Arch	Loop	Whorl	Not Suitable	N/A
Total	0	155	7	11	99

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

Additional Comments

TABLE 5

WebCode	Additional Comments
28T3R3	Item 1: Latent development was observed in quadrant "D", however did not possess significant ridge detail.
2BAMCW	My unit does not process silver duct tape (adhesive side) such as Items 2A, 2B, 2C and 2D, therefore, I was unable to complete the Item 2 section of this examination. My unit does not examine items for latent print ridge detail, such as first-level detail (pattern types).
2KCPU9	Testing surfaces are processed with accredited methods for proper type of surfaces, those methods are applied also in a real cases, these methods are accredited methods.
2W77JA	In Item 1: ninhydrin was used for this evidence, following [Laboratory] protocols, no prints came out.
3DU74Y	Item 2 - Four pieces of silver duct tape, labeled as pieces A-D -All four pieces(A-D) were treated with the methods listed under the results for Item 2. The reaction on the piece with the letter "D" was consistent with a fingermark. Based on the reaction for the piece with the letter "D", no further analysis or collection would be conducted according to our laboratory procedures and protocols.
3KCRYN	Development of the print on the paper (Item 1) was very poor quality with minimal detail observed. The metal discs (Item 3) absorbed the dye stain (R6G) and had strong fluorescence of the background (could be due to being untreated/unfinished metal)
473XWT	Question 1-5: The developed friction ridge detail is fragmentary with no visible pattern type. Deemed not suitable for determination. Question 2-5: The developed latent print pattern type is either a tented arch or small count left slant loop. Due to distortion in the core, I was unable determine a ridge count between the delta and the core.
4KB2JT	The potential development in quadrant D on item 1 only had faint, partial and broken ridge detail that was of no value - not sufficiently recovered. Traditionally the FSIS is used for glossy, non-porous surfaces; however, it has been noted that, in some instances, it is successful in visualizing friction ridge detail on porous surfaces as well. Due to this finding, it was also used to examine item 1, porous item. Internal lab validation and sequential processing using 1,2-Indanedione and Aqueous Ninhydrin has shown that processing an item with Aqueous Ninhydrin first and then followed by 1,2-Indanedione, has been successful in visualizing and darkening friction ridge detail developed on porous items. Due to this finding, the processing sequence was used to process and examine item 1. After letting item 1 sit over the weekend to allow for any additional development to happen, the item was visually examined and then re-processed with Aqueous Ninhydrin.
629FZT	Unable to discern pattern type for Item 1 and Item 3
6FLQNF	Grettings from [Country]
6XPGTP	There was a small amount of fragmented ridge development on Item #1 in Quadrant C using DFO. The ridge detail that developed on Item #1 in Quadrant D was also fragmented and missing the core of the pattern. The latent print that developed on Item #2 on sticky side of duct tape labeled "D", had what appeared to be a double tap and had lateral movement in the print which helped obscured the core of the pattern.
6ZW4FN	After processing Item #2, an area of development consistent with a “finger mark” was developed on letter "D". No ridge detail was observed at this time. In this lab, this item would be deemed as “not of value” (NOV), and no further analysis would be conducted.
7PP9WX	Item 1. "poor punctate". Testpaper was quality 3/5; Item 2. Possible Match; Item 3. High quality match
8REWUJ	Test 1 - very poor development of mark within box D. Able to visualise an outline of a fingerprint with a very small area of ridge detail with Indandione treatment. No further development with Ninhydrin. I would not photograph this mark and submit to the Regional Fingerprint Bureau (RFB) had this been live

TABLE 5

WebCode	Additional Comments
	casework. Test 2 - moderate to poor development of mark within box D. Some area of ridge detail enhanced with a faint appearance. I would photograph and attempt to enhance with DCS capture software prior to submission to RFB had this been live casework. Test 3 - very good development of mark within box B. All ridges of the deposited fingerprint were present using SG/DYE including both first, second and third level detail. Mark was sharp and of an excellent quality. The mark was inverted (the background substrate fluoresced and the ridges appeared black). This would have been photographed and submitted to the RFB had this been live casework. Mark also developed with Solvent Black to a moderate quality.
8UMKDZ	On 05/31/19 I received from [Name] items that needed to be latent print processed. I received one (1) sealed box with two (2) white labels affixed. The first white label had "2019 CTS Forensic Testing Program TEST NO. 19-5190: LATENT PRINT PROCESSING Sample Pack: LAP1", printed on it in black and the second white label had "CONTAINS LATENT PRINT EVIDENCE DO NOT HANDLE WITHOUT GLOVES" printed on it in black. The box contained three (3) sealed manila envelopes with CTS on the seal, the first envelope labeled item 1 contained a notice to workers on white office paper. The second envelope labeled item 2 contained four (4) pieces of silver duct tape. The third labeled item 3 contained four (4) metal roofing discs. The items were latent print processed per the request.
8X4RTM	Item #2 - All four (4) pieces of duct tape were treated with the Wetwop reagent. Pieces "B", "C" and "D" showed no reaction or development of latent print evidence. Piece "A" showed a reaction to the reagent with the development of the size and shape morphology consistent with a possible "finger mark." No ridge detail was observed for this item. In this lab, this item would be deemed as "not of value" (NOV), and no further analysis would be conducted.
9FWRZT	Unable to determine pattern type for Item 1 and Item 2.
9JXVUZ	Item 2 was processed as a semi-porous item before noting the adhesive side requirement for the duct tape squares. As such, the processes used between magnetic powder and WetWop may have negatively impacted latent print development on the adhesive side of the duct tape squares.
AFRU6M	Item 1 pattern type was unable to be determined because pattern area was not visible
ANLYYN	Item 1 and Item 2: pattern area was not clear in the detected print, so the pattern was unable to be determined.
AY6E2Q	Unable to determine pattern Item 2
B2QU9H	An insufficient reaction occurred in Section D of Item 1. I was undetermined on if this reaction was friction ridge detail or not. It was not photographed for this reason.
B7GRJM	unable to determine pattern for item 2
B9QTL7	Item 1 : The fingermark was not visible during visual examination before Indanedione / Zinc chloride treatment. The fingermark was observed after Indanedione / Zinc chloride treatment. No improvement was observed after Ninhydrin treatment or after Physical Developer treatment. Item 2 : The fingermark was not visible during visual examination before Wetwop treatment. The fingermark was observed after Wetwop treatment. Item 3 : The fingermark was not visible during visual examination before Lumicyano Powder treatment. The fingermark was observed after Lumicyano Powder treatment. The number of possible options for the pattern of the fingermark is greater than 2 (loop, whorl, composite...)
C47AWB	In this box, Item 1 and 2 were mixed up. I marked them before i started. For me item 1 is duct tape and 2, white office paper. This has been corrected and each material is marked on right item paper.
CJM3TU	The fingerprint trace revealed on white office paper is of poor quality and is unsuitable for identification.
D8RRWD	The "print" on the duct tape had no ridge detail, only a faint oval shape approximately finger-sized. In normal casework I would never have taken a picture of this. Similarly, the "print" on the paper was a severely fragmented, smudgy partial print, at best. I also would not have called this a print or taken a

TABLE 5

WebCode	Additional Comments
	picture in normal casework.
DJKN2E	Development occurred in Quadrant D in Item 1, but unable to determine pattern type. Print is not of value for further comparison or elimination. The print that was developed in Quadrant D on Item 2 is either a small count loop or can be referenced as an arch. Can't determine if the recurve is spoiled or not.
DQHM4N	ITEM 2: ARCH OR SMALL COUNT LOOP/WHORL
DWQ4LP	I noticed that the prints I developed were very faint and hard to see. The piece of paper (Item 1) required a great deal of enhancement in photoshop in order make the print visible. Without enhancement I could not observe friction ridge details.
E6GQ9E	Though some ridge detail is visible after processing, all three items lacked sufficient latent print ridge detail to determine a pattern type. All three items processed were NLOV and latent print ridge detail on Item 1 was nearly nonexistent.
EMV3Z6	Item 1: A few purple dots were developed with ninhydrin in Section D however, there was insufficient detail for it to be considered as ridge detail.
EWNDCL	Item 2 showed possible mark but without ridge
EZNP9L	Item 2 showed possible mark but without ridge details
F3MZGC	Item 1 had what looked like a shape of a print in quadrant D, but there was poor ridge detail. This would not have been photographed if it was found in casework.
F9UVF9	Item 1 - No ridge detail seen visually. Very poor quality ridge detail developed with 1,2 Indandione, such that I would not normally recover to send to the fingerprint bureau. I continued treatment with Ninhydrin as we would for serious cases, no ridge detail was enhanced with Ninhydrin. Item 2 - No ridge detail seen visually. Continued with powder suspension carbon, good quality ridge detail seen in D. Item 3 - Some ridges seen on B with white light visually, although of poor quality and not suitable for recovery to send to the fingerprint Bureau. Continued treatment with cyanoacrylate and dye. Good quality ridge detail found on B. Continued treatment with solvent black 3 as we would for serious crime, good quality ridge detail found on B.
FP28QY	Regarding Item 3 (metal discs A, B, C and). A suitable latent was captured on Item 3 disc B (loop); the other photograph captured on discs A and C would not have been suitable in real case work.
FWHKRJ	Unable to determine pattern type on Item 1 and Item 2.
HTUQ8M	All chemicals used during Latent Print Processing on items 1, 2, 3 were tested on similar types of surfaces with positive results. In the section D on the item nr 1 (office paper) was developed a fragmentary and poor visible latent print of no value to identification.
JU2PF2	Latent prints appeared to be poor quality. In regular case work, except for the LP on the metal disc, I would not have documented / recovered latent prints due to the poor quality. For proficiency testing I would like to see prints of a little better quality, even if they're a partial print.
K4HWRV	Item 1 was processed twice due to negative result. Test prints were both strong positives. Slight color reaction did occur in area D. Viewed a second time on 07/10/19. No additional development was observed.
KE6P6D	On item 1 (paper notice) I had absolutely no ridge detail develop. On item 2, an outline of a touch mark developed on duct tape piece D. No ridge detail was developed, therefore I selected "none" as my response for this item.
L83VQC	Item 1: Very faint impression. Difficult to determine pattern type and record via photographs. Item 2: Excessive deposition pressure. Difficult to determine pattern type.

TABLE 5

WebCode	Additional Comments
LJAX29	All chemicals were tested with positive results prior to using. ALS utilized was the Foster and Freeman Crime Light. I do not perform comparisons. Item #1 (paper) had a reaction with Ninhydrin causing orange and black coloring. The coloring was not observed on the test paper. Typically, we would end analysis after Ninhydrin when processing white paper but due to an odd reaction causing the paper to turn orange and black in areas, further processing was completed. Developed insufficient ridge detail in box D. Item #2 (tape) developed ridge detail on tape D. Item #3 (disk) reacted well with Lumicyano. Ridges were best observed under UV light. Ridge detail was developed on disk B.
MPCEWE	Item 2 showed possible mark but without ridge details
MQPE79	It is difficult to report the pattern type of a recovered latent print when the center or core of the print is not discernible. The purpose of recovering latent prints from items of evidence is to recover comparable latent prints. The "recovered" latent prints in this processing test were not all comparison quality nor was the pattern type easily discernible. If part of the assessment to pass this test is also determining pattern type of the "recovered" latent prints, it fails scrutiny if you are asking participants to "guess" the pattern type of a latent print that is not even comparison quality. As a Forensic Scientist it is not prudent to ever "guess" even if it is on a proficiency test.
MYHA87	Result: Item 1. No result, testing paper was OK; Item 2. No result, but item D had some lines maybe? Item 3. Clear fingerprint, testin plastic was OK.
MYJWUC	We only found very rare ridge details for items 1 and 2.
MZVX8X	For Item 1, faint purplish discolouration/stains were observed in the middle of Quadrant D. However, there were insufficient details for us to conclude that it was a print.
N3YNGY	Impressions detected on items 1 & 2 did not contain suitable detail for capture
NKDBWE	Item 1. "poor punctate". Item with testpaper. Testpaper quality 5/5; Item 2. Posiible match; Item 3. High quality match
NZ9P3Z	No discernible friction ridge detail on Item #1. There is faint, pinkish purple spotting visible in quadrant D, vaguely in the shape of a finger. Applied additional humidity and heat on 7/2/2019 with no further development. Examined the paper again on 7/8/2019 with no additional development. The cores of the latent in Items 2D and 3B were not clear, but I was still able to discern the first-level patterns. Item 3B appears to be either an arch or a short count loop.
PECPPH	For item 2 (adhesive tape) the processing steps for the non-adhesive were not conducted per the instructions of the test, which includes: Cyanoacrylate fuming, RAY dye staining and dusting powder to the non-adhesive side.
PM8UHJ	On 6/3/19 I received a white colored box, closed with brown tape, and marked “2019 CTS Forensic Testing Program, TEST NO. 19-5190: LATENT PRINT PROCESSING, Sample Pack: LAP1”. Contents of the box were examined on 6/7/19. The box contains three (3) yellow envelopes and bubble wrap. The envelopes are marked “Test No. 19-5190, Item 1”, “Test No. 19-5190, Item 2” and “Test No. 19-5190, Item 3”; all envelopes are sealed with evidence tape and initialed “CTS”. The envelope marked “Item 1” contains one (1) piece of white colored paper with black colored printing and with quadrants indicated as A-D on one side; a piece of cardboard is also inserted in the envelope. The envelope marked as “Item 2” contains one (1) piece of white colored wax type paper with four (4) pieces of gray colored duct tape affixed to one side, each piece contains one letter, A-D, written on the non-adhesive side in black colored marker; a piece of cardboard is also inserted in the envelope. The envelope marked as “Item 3” contains three (3) small yellow coin envelopes, all closed with tape and marked “Test No. 19-5190”, with 3A-3D. Each coin envelope contains one (1) silver colored disc, each labeled as A-D.
QVWCG8	Item 1: Section D is the only section that showed some development of ridges. What looks like the lower right side of a fingerprint has developed. Only a few ridges have developed so it is hard to tell. If I had not developed any ridges, I would have chosen NONE. Item 2: After processing, there was

TABLE 5

WebCode	Additional Comments
	ridges flowing around the edge of the print but the core was smudged and not clear, therefore the pattern was undetermined.
QXXM6U	Item 1: A faint area of purple dots developed using Ninhydrin in Section D, however there was insufficient detail to be of value.
QYMXX9	Unable to determine definitive pattern type for items #1 and #3; prints not clear around core.
R9YQ9A	Per [Laboratory] Crime Scene Standard Operating Procedures, I don't examine the types of surfaces on items 1 and 2 at the scene and I do not have the qualifications to examine them. They were not opened or examined. We are not trained to make pattern determination.
RRPPUT	Our laboratory uses as reference the [Standard] rule. Our laboratory is accredited in this testing discipline with acreditation number of [Number].
T9PV3M	For Item #1 (piece of paper with typed writing) had barely any ridge details. I took digital photographs to show what I saw. But my conclusion is that there was no suitable latent. For Item #2 (adhesive side of piece of grey tapes). Some ridge details were recovered. Looking closer at the latent impression, the ridges around the core area were so blurred together within the lines of the adhesive side of the tape. It made it difficult to cross reference any first-level patterns. My conlusion is that this latent impression would not have been suitable for comparison.
THG7F4	Item 1 processed using steps/methods listed on sheet. No visible ridge detail observed.
TKKWN4	The quality of the latent print on Item 1 was extremely poor. The ridge detail was barely detectable with Ninihydrin processing. This is the second CTS processing test with extremely poor quality/difficult to detect prints on the porous item(s).
UU4FCE	When processing item 2, I used green light with a red filter, and then blue light with an orange filter to attempt to visualize prints using Gentian Violet. Neither of them brought any specific ridge detail so I used white light, this allowed me to see some detail. However when I left the orange filter on and used white light I was able to best visualize the ridge details.
UULCV2	Since you are testing two different components in the same exercise, I suggest standardizing the component with a subjective determination. When testing a person's ability to properly process evidence for FRD, ensure the prints are of a good quality/quantity of detail. Do not include fragments of extreme low quality and low quantity for this component. When testing a person's ability to determine if a print is of sufficient quality/quantity to document and/or to determine a pattern type, I suggest providing standardized images so that all test takers are evaluating the same data as opposed to evaluating detail that will differ between test takers.
VDCLY9	Item 1: A faint print was observed in Quadrant D and it is not suitable for comparison. Item 2: A Smudged print was observed in duct tape D and not suitable for comparison. Item 3: A Fingerprint was observed in disc B and it is suitable for comparison.
VUJD87	Tape items are usually treated w/superglue prior to Wetwop. Since exam specified adhesive side to be processed, superglue treatment was skipped.
VUZBCV	Item 1 had fragment development in section D of the office paper after processing but no ridge detail was developed.
VWXNY	For item number three (four silver-colored metal discs A-D) - I initially placed the item in the superglue chamber, after a few hours, I took the item out thinking that the superglue chamber had been run, but I was notified that the superglue chamber had not been run.
VWP9JV	Fluorescence examaination was with Polilight PL 500 and appropiate edge filters
WEMJB6	Item 2 showed possible mark but without ridge details
WR7DF4	The quality of the fingerprint placed in section D of Item 1 was without ridge details. Only small dots

TABLE 5

WebCode	Additional Comments
	marking the outer area of the fingerprint were developed. Before developing, testmaterial were used, leading us to the conclusion that the methods, equipment and solutions used actually worked.
WVBDXU	I did not examine/process Items 1 and 2 as I am not authorized to do so.
WZL8CJ	Thank you for having given us the three types of supports in order to test all of our revelation modes
XK83P6	Item 2 pattern is uncertain.
XXG2TQ	There was a fingermark on Tape D Of Item 2. This fingermark contained minimal ridge detail. The ridge detail is of insufficient quality and quantity; therefore, it is not suitable for further examination. No digital images of ridge detail were captured for Item 2.
YEEKNY	Item 1 - the pattern type is uncertain without a proper analysis - Unable to determine the pattern type without capturing the print and being able to do a proper analysis. It was most likely a loop, but may have been an arch. Based on the top of the core that was visible, it is unlikely, yet still possible that the print is a whorl. Most of the clear part of the print was in the tip area. Item 2 - the pattern type is uncertain without a proper anaylsis - The print was patchy and had interference from the striations in the duct tape. It was borderline suitable for capture, due to poor quality. Without a proper analysis, which I would do after capturing the print had that been done, I might have been able to tell the pattern type. At this point, however, I was unable to determine the pattern type.
YK7JMN	After processing Item #2, an area of development consistent with a “finger mark” was observed on letter “D.” No ridge detail was observed at this time. In this lab, the item would be deemed as “not of value” (NOV) and no further analysis would be conducted.
Z3V97U	Test performed by [Name] and [Name]. [Laboratory]. Next time, please send a little harder test=). Have a happy summer!
ZAWK2R	During the tests we use the following equipment: POLILIGHT PL 500 SC made by Roofin - it's a high intensity light source that emit light in a controlled spectrum centered at the labeled wavelenght 350-650 nm, white and IR. MVC 3000 made by Foster+Freeman - it's cyanokarylate fuming chamber. NINcha S31 made by Attestor Forensics - it's forensic climate chamber for Ninhydrin and DFO treated fingerprint evidence.
ZJL7F3	Item 2 showed possible mark but without ridge details

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 19-5190: Latent Print Processing

DATA MUST BE SUBMITTED BY **July 29, 2019, 11:59 p.m.** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A WebCode: N8AH9U

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

Scenario:
During the weeks of 8 April 2019 and 5 May 2019, three items of evidence were recovered from crime scenes. Police have requested that you process each item of evidence for latent prints. These items will not undergo additional testing in other departments, so you may use destructive testing if necessary.

Items Submitted (Sample Pack LAP1):
Item 1: Notice to workers on white office paper, divided into sections A-D (collected 8 April 2019).
Item 2: Four pieces of silver duct tape, labeled as pieces A-D (collected 5 May 2019, adhesive side intended for processing).
Item 3: Four metal roofing discs, labeled as discs A-D (collected 8 April 2019, reverse side from label intended for processing).

Please inspect your sample sets upon receipt. If the tape seal on any of your individual items is broken, please contact CTS for replacement samples.

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

Please indicate only the single letter of your determined location; further explanation may be provided in the Additional Comments. If no ridge detail is recovered, please enter "None". Responses such as "N/A", "-", "No Result" are unacceptable.

Item 1
Item 2
Item 3

Results for Item 1:

Notice to workers on white office paper, divided into sections A-D (collected 8 April 2019).

1-1.) Date Samples Received:

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

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

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

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

Method Used	Methodology-specific information

1-5.) What first-level pattern(s) are referenced in the recovered latent print?
If ridge detail was recovered, choose up to 2 pattern types. If ridge detail was not sufficiently recovered, please select "Not suitable for determination." If you are not trained to make pattern determinations, please select "N/A".

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

Results for Item 2:

Four pieces of silver duct tape, labeled as pieces A-D (collected 5 May 2019, adhesive side intended for processing).

2-1.) Date Samples Received:

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

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

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

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

Method Used	Methodology-specific information

2-5.) What first-level pattern(s) are referenced in the recovered latent print?
If ridge detail was recovered, choose up to 2 pattern types. If ridge detail was not sufficiently recovered, please select "Not suitable for determination." If you are not trained to make pattern determinations, please select "N/A".

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

Results for Item 3:

Four metal roofing discs, labeled as discs A-D (collected 8 April 2019, reverse side from label intended for processing).

3-1.) Date Samples Received:

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

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

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

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

Method Used	Methodology-specific information

3-5.) What first-level pattern(s) are referenced in the recovered latent print?
If ridge detail was recovered, choose up to 2 pattern types. If ridge detail was not sufficiently recovered, please select "Not suitable for determination." If you are not trained to make pattern determinations, please select "N/A".

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

4.) Additional Comments

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

Participant Code: U1234A
WebCode: N8AH9U

RELEASE OF DATA TO ACCREDITATION BODIES

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

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

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

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

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

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

A2LA Certificate No.

Step 2: Complete the Laboratory Identifying Information in its entirety

Authorized Contact Person and Title

Laboratory Name

Location (City/State)