



Handwriting Test No. 11-524 Summary Report

This test was sent to 215 participants. Each sample set contained a photograph of two questioned prescriptions (Q1 and Q2) and photographs of known writings from two individuals. Participants were requested to examine these items and report their findings. Data were returned from 169 participants (79% response rate) and are compiled into the following tables:

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

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

Manufacturer's Information

Each sample set contained photographs of two questioned prescriptions (Q1 and Q2) and photographs of known writings. Course of business writings and dictated exemplars were provided by Rachel Dougherty (K1) and Richie Dougherty (K2). Participants were asked to determine which, if any, of the handprinted text and/or signatures were produced by either of the two individuals.

SAMPLE PREPARATION-

The handprinted text and signature on Q1 were both produced by the K1 writer, Rachel Dougherty. The handprinted text on Q2 was produced by the K2 writer, Richie Dougherty. The signature on Q2 was produced by a third writer, for whom no exemplar writing was provided. During production of dictated writing, the K1 and K2 writers were instructed as to when to begin a new line of text in the body of the prescription to maintain uniformity of appearance.

The questioned Q1 and Q2 documents were selected from several versions created by dictated writing.

The writer of K1 is female, and the writer of K2 is male. The unidentified writer of the Q2 signature is female.

SAMPLE SET ASSEMBLY: Once verification was completed, each photo set was placed into a pre-labeled sample pack envelope, sealed with evidence tape, and initialed "CTS".

VERIFICATION-

Predistribution testing confirmed the manufacturer's expected results. The handprinted text and signatures on Q1 were both produced by the K1 writer. The handprinted text on Q2 was produced by the K2 writer. Two predistribution laboratories neither identified nor eliminated the K1 and K2 writers as having produced the signature on the Q2 item. The third predistribution laboratory eliminated both the K1 and K2 writers as having produced the Q2 signature.

Summary Comments

This test was designed to provide participants with a handprinted text and signature identification challenge involving two questioned prescriptions (Q1 and Q2) where different parts of both Q1 and Q2 were written by three different writers. Each sample set contained photographs of two questioned prescriptions (Q1 and Q2) and photographs of known writings. Both course of business writings and dictated exemplars were provided by Rachel Dougherty (K1) and Richie Dougherty (K2). Participants were requested to determine which, if any, of the handprinted text and/or signatures were produced by either of the two individuals. The K1 writer was instructed to produce the handprinted text and signature in Q1. The K2 writer was instructed to produce the handprinted text in Q2. The signature in Q2 was produced by a third writer, for whom no exemplar writing was provided. [Refer to Manufacturer's Information for production details.]

For question 1 "Which, if any, of the known writers wrote the questioned writing (excluding the signature) on each of the questioned prescriptions?" (Table 1a), 169 of the 169 participants (100%) identified the K1 writer (reported "A" or "B") as the writer of the handprinted text in Q1 and the majority of these (157) eliminated the K2 writer (reported "D" or "E"). In regards to Q2, 169 of the 169 participants (100%) identified the K2 writer (reported "A" or "B") as the writer of the handprinted text in Q2 and the majority of these (156) eliminated the K1 writer (reported "D" or "E"). One participant reported that they could not identify or eliminate the K1 writer ("C").

For question 2 "Which, if any, of the known writers wrote the questioned signature on each of the questioned prescriptions?" (Table 1b), 169 of the 169 participants (100%) identified the K1 writer (reported "A" or "B") as the writer of the signature in Q1 and the majority of these (156) eliminated the K2 writer (reported "D" or "E"). Two participants reported that they could not identify or eliminate the K2 writer ("C").* In regards to Q2, 145 of the 169 participants (86%) reported that the K1 or K2 writers did not (reported "D" or "E") or could not be identified/eliminated (reported "C") as having produced the signature in Q2.* Eighteen participants identified the K1 writer ("A" or "B") and the majority of these (16) eliminated ("D" or "E") or could not identify/eliminate ("C") the K2 writer. Six participants identified the K2 writer ("B") and eliminated the K1 writer ("D" or "E").

The conclusions and comments of many of the participants who reported less than definite conclusions for Q1 and Q2 indicated that this was because they were working with photographs rather than with original documents. Some participants commented that there was an insufficient amount of comparable known writings for the K1 and K2 writers thus preventing them from forming a more definite conclusion or any opinion at all.

Five participants reported written conclusions (Table 2: Conclusions) that appeared to differ from their responses in Table 1: Examination Results. These participants have been indicated with an "" in Table 1.

Examination Results

Which, if any, of the known writers wrote the questioned writing (excluding the signature) on each of the questioned prescriptions?

TABLE 1a- Handwriting on Q1

WebCode	Handwriting on Q1		WebCode	Handwriting on Q1	
	K1	K2		K1	K2
22QFA8	A	-	6LJNU8	A	E
26LHML	A	E	7794VF	A	E
2G3YZM	A	E	7A43ZD	A	E
2KZKMJ	B	D	7D743V	A	E
2UPCTN	A	E	7MT4CD	B	D
3B9JNK	A		7TKADU	A	E
3C4YZH	A	E	7UQUTX	A	E
3F9MKD	A	E	82ACWG	A	E
3KWELF	A	E	8BWBMM	A	E
3M26RU	A	E	8D3TRA	A	E
3MN4GU	A	E	8FB2WN	A	E
3PUN39	A	E	8MM6YG	A	E
3PURUY	A	E	8URY2P	A	D
3Q3TMK	A	E	99PFJA	A	E
3Z789H	B	E	9B9EQD	A	E
4C3NHJ	A	X	9Q7C6V	A	-
4E9YQG	A	E	9Q8AD6	A	E
4NDWPH	A	E	9RZA7A	A	E
4T72CU	A	E	9U2KWH	A	
63NYGQ	A	E	9U38JN	A	
643JAZ	A	E	A8M8PG	A	E
644GHB	A	E	AFZWQA	A	E
6ATUKY	A	E	AXHZAG	A	
6HJENC	A	E	BAULWM	A	E
6JHHE2	A	E			

TABLE 1a- Handwriting on Q1

WebCode	Handwriting on Q1		WebCode	Handwriting on Q1	
	K1	K2		K1	K2
BFWN49	A	E	FUHV34	A	E
BH4BAL	A		FVGXTU	A	E
BJFX28	A	E	G4L69U	A	E
BNP9Y9	A	E	G4M3G4	A	E
BQGXM	A	E	G8KM6Z	A	E
BVQDY6	A	E	GELXGK	A	E
BW6PWA	A	E	GGC4T6	A	E
BWPGQU	A	E	GGPTY3	B	D
CA7MA9	A	E	GHNVQR	A	-- (see comments)
CKP8KX	A	E	GJV6RX	A	E
CVM9W2	A	E	GZQFQ2	A	E
CVMBNQ	A	E	H76NKB	A	E
D6BBWN	A	E	HJVHVJ	A	E
D6M3N6	A	E	HK7JJ4	A	E
D7GZT6	A	E	HN43JG	A	E
DJ8QWH	A	E	HUC3G2	A	E
DWBYRE	A	E	J2NXGT	A	E
E9LQVE	A	E	J3M28H	A	E
EC7NFN	A	E	J4ZHJB	A	E
EJ2VPG	A	E	JDZAPF	A	E
FC2QHX	A	E	JFA3XW	A	E
FDEAC3	A	E	K8FAA4	A	E
FDZUAM	A	E	KNY3X8	A	E
FF4GWZ	A	E	KQ6QBC	B	D
FJGAV6	A	E	KUPD96	A	E
FKUY3N	A	E	KYE62K	A	E
FL7H3L	A	E			

TABLE 1a- Handwriting on Q1

WebCode	Handwriting on Q1		WebCode	Handwriting on Q1	
	K1	K2		K1	K2
KYF3AU	A	E	R24MK7	A	E
L7RNRW	A	E	R3B9PX	A	
LC622W	A	E	RBNAZ2	A	E
LW7CKQ	A	E	RKABHW	A	E
LW7FCF	B	E	RYCXPR	A	E
MB36FR	A	E	T3RHJK	A	E
MCR99Y	B	D	T447TY	A	-
MD9LVB	A	E	T4KHDP	A	E
MK8TTX	A	E	T4QLBA	A	E
MLM4XH	A	E	TMG27Q	B	D
MYPQNNQ	A	E	TRTRU7	A	E
MZKEYA	A	E	UB7NVH	A	E
MZNUFG	A	E	UEDGGZ	A	E
NAM38X	A	E	ULXL7U	A	D
NGLJ3X	A	E	UXRTAQ	A	E
P8CHYN	A	E	V6QHQQV	A	E
PC7ELU	A	E	VJ9ELX	A	E
PG7EBQ	A	E	VU7FZM	A	
PQQQHX	A	E	W3KEEY	A	E
PWFC6Q	A	E	WAJ4V3	A	E
Q4TJKU	A	E	WDEZAV	A	E
QFNUX8	A	E	WPA8DR	B	E
QKKGNA	A	E	WR2V3E	B	E
QKX2GK	A	E	WTUUBL	A	E
QKYXPU	A	E	WUNNPG	A	E
QNG8NU	A	E	WWBJAP	A	E
QTT7BL	A	E			

TABLE 1a- Handwriting on Q1

WebCode	Handwriting on Q1		WebCode	Handwriting on Q1	
	K1	K2		K1	K2
XADAQM	A	E			
XQFXXT	A	E			
XVDCKH	A	E			
YJXXYV	A	E			
YLQJZY	A	E			
YPJT3K	A	E			
YTH7L3	A	E			
YW4THW	A	E			
YYA89B	A	E			
YYB4GL	A	E			
Z2WCXZ	A	E			
Z9B64P	A	E			
ZEG2NP	A	E			
ZHEKPN	A	E			

Response Summary Handwriting on Q1			Total Participants: 169
<i>Which, if any, of the known writers wrote the questioned writing (excluding the signature) on each of the questioned prescriptions?</i>			
Response	Handwriting on Q1		
	K1	K2	
A	159	0	<p>Note: The totals do not add up to the total number of participants because not all participants marked a response for all items or did not use provided key.</p> <p>Response Key:</p> <p>A: Was WRITTEN by; B: Was PROBABLY WRITTEN by (some degree of identification); C: CANNOT be IDENTIFIED or ELIMINATED; D: Was PROBABLY NOT WRITTEN by (some degree of elimination); E: Was NOT WRITTEN by.</p>
B	10	0	
C	0	0	
D	0	8	
E	0	149	

TABLE 1a- Handwriting on Q2

WebCode	Handwriting on Q2		WebCode	Handwriting on Q2	
	K1	K2		K1	K2
22QFA8	-	A	7A43ZD	E	A
26LHML	E	A	7D743V	E	A
2G3YZM	E	A	7MT4CD	D	B
2KZKMJ	D	B	7TKADU	E	A
2UPCTN	E	A	7UQUTX	E	A
3B9JNK		B	82ACWG	E	A
3C4YZH	E	A	8BWBMM	E	A
3F9MKD	E	A	8D3TRA	E	A
3KWELF	E	A	8FB2WN	E	A
3M26RU	E	A	8MM6YG	E	A
3MN4GU	E	A	8URY2P	D	A
3PUN39	E	A	99PFJA	E	A
3PURUY	E	A	9B9EQD	E	A
3Q3TMK	E	A	9Q7C6V	-	A
3Z789H	E	A	9Q8AD6	E	A
4C3NHJ	X	A	9RZA7A	E	A
4E9YQG	E	A	9U2KWH		A
4NDWPH	E	A	9U38JN		A
4T72CU	E	A	A8M8PG	E	A
63NYGQ	E	A	AFZWQA	E	A
643JAZ	E	A	AXHZAG		A
644GHB	D	B	BAULWM	E	B
6ATUKY	E	A	BFWN49	E	A
6HJENC	C	A	BH4BAL		A
6JHHE2	E	A	BJFX28	E	A
6LJNU8	E	A	BNP9Y9	E	A
7794VF	E	A			

TABLE 1a- Handwriting on Q2

WebCode	Handwriting on Q2		WebCode	Handwriting on Q2	
	K1	K2		K1	K2
BQGXUM	E	A	G8KM6Z	E	A
BVQDY6	E	A	GELXGK	E	A
BW6PWA	E	A	GGC4T6	E	A
BWPGQU	E	A	GGPTY3	D	B
CA7MA9	E	A	GHNVQR	-- (see comments)	A
CKP8KX	E	A	GJV6RX	E	A
CVM9W2	E	A	GZQFQ2	E	A
CVMBNQ	E	A	H76NKB	E	A
D6BBWN	E	A	HJVHVJ	E	A
D6M3N6	E	A	HK7JJ4	E	B
D7GZT6	E	A	HN43JG	E	A
DJ8QWH	E	A	HUC3G2	E	A
DWBYRE	E	A	J2NXGT	E	A
E9LQVE	E	A	J3M28H	E	A
EC7NFN	E	A	J4ZHJB	E	A
EJ2VPG	D	B	JDZAPF	E	A
FC2QHX	E	A	JFA3XW	E	A
FDEAC3	E	A	K8FAA4	E	A
FDZUAM	E	A	KNY3X8	E	A
FF4GWZ	E	A	KQ6QBC	D	B
FJGAV6	E	A	KUPD96	E	A
FKUY3N	E	A	KYE62K	E	A
FL7H3L	E	A	KYF3AU	E	A
FUHV34	E	A	L7RNRW	E	A
FGXTU	E	A	LC622W	E	A
G4L69U	E	A	LW7CKQ	E	A
G4M3G4	E	A			

TABLE 1a- Handwriting on Q2

WebCode	Handwriting on Q2		WebCode	Handwriting on Q2	
	K1	K2		K1	K2
LW7FCF	E	B	RYCXPR	E	A
MB36FR	E	A	T3RHJK	E	A
MCR99Y	D	B	T447TY	-	A
MD9LVB	E	A	T4KHDP	E	A
MK8TTX	E	A	T4QLBA	E	A
MLM4XH	E	A	TMG27Q	D	B
MYPQNNQ	E	A	TRTRU7	E	A
MZKEYA	E	A	UB7NVH	E	A
MZNUFG	E	A	UEDGGZ	E	A
NAM38X	E	A	ULXL7U	D	A
NGLJ3X	E	A	UXRTAQ	E	A
P8CHYN	E	A	V6QHQQV	E	A
PC7ELU	E	A	VJ9ELX	E	A
PG7EBQ	E	A	VU7FZM		A
PQQQHX	E	A	W3KEEY	E	A
PWFC6Q	E	A	WAJ4V3	E	A
Q4TJKU	E	A	WDEZAV	D	B
QFNUX8	E	A	WPA8DR	E	B
QKKGNA	E	A	WR2V3E	E	B
QKX2GK	E	A	WTUUBL	E	A
QKYXPU	E	A	WUNNPG	E	A
QNG8NU	E	A	WWBJAP	E	A
QTT7BL	E	A	XADAQM	E	A
R24MK7	E	A	XQFXXT	E	A
R3B9PX		A	XVDCKH	E	A
RBNAZ2	E	A	YJXXYV	E	A
RKABHW	D	B			

TABLE 1a- Handwriting on Q2

WebCode	Handwriting on Q2		WebCode	Handwriting on Q2	
	K1	K2		K1	K2
YLQJZY	E	A			
YPJT3K	E	A			
YTH7L3	E	A			
YW4THW	E	A			
YYA89B	E	A			
YYB4GL	E	A			
Z2WCXZ	E	A			
Z9B64P	E	A			
ZEG2NP	E	B			
ZHEKPN	E	B			

Response Summary Handwriting on Q2			Total Participants: 169
<i>Which, if any, of the known writers wrote the questioned writing (excluding the signature) on each of the questioned prescriptions?</i>			
Response	Handwriting on Q2		
	K1	K2	
A	0	151	<p>Note: The totals do not add up to the total number of participants because not all participants marked a response for all items or did not use provided key.</p> <p>Response Key:</p> <p>A: Was WRITTEN by; B: Was PROBABLY WRITTEN by (some degree of identification); C: CANNOT be IDENTIFIED or ELIMINATED; D: Was PROBABLY NOT WRITTEN by (some degree of elimination); E: Was NOT WRITTEN by.</p>
B	0	18	
C	1	0	
D	12	0	
E	144	0	

Examination Results

Which, if any, of the known writers wrote the questioned signature on each of the questioned prescriptions?

TABLE 1b- Signature on Q1

WebCode	Signature on Q1		WebCode	Signature on Q1	
	K1	K2		K1	K2
22QFA8	A	-	6LJNU8	A	E
26LHML	A	E	7794VF	A	E
2G3YZM	A	E	7A43ZD	A	E
2KZKMJ	B	D	7D743V	A	E
2UPCTN	A	E	7MT4CD	B	D
3B9JNK	A		7TKADU	A	E
3C4YZH	A	E	7UQUTX	A	E
3F9MKD	A	E	82ACWG	A	E
3KWELF	A	E	8BWBMM	A	E
3M26RU	A	E	8D3TRA	A	E
3MN4GU	A	E	8FB2WN	A	E
3PUN39	A	E	8MM6YG	A	E
3PURUY	A	E	8URY2P	A	E
3Q3TMK	A	E	99PFJA	A	E
3Z789H	B	E	9B9EQD	A	E
4C3NHJ	A	X	9Q7C6V	A	-
4E9YQG	A	E	9Q8AD6	A	E
4NDWPH	A	E	9RZA7A	A	E
4T72CU	A	E	9U2KWH	A	E
63NYGQ	A	E	9U38JN	A	
643JAZ	A	E	A8M8PG	A	E
644GHB	A	E	AFZWQA	A	E
6ATUKY	A	E	AXHZAG	B	
6HJENC	A	E	BAULWM	A	E
6JHHE2	A	E	BFWN49	A	E

TABLE 1b- Signature on Q1

WebCode	Signature on Q1		WebCode	Signature on Q1	
	K1	K2		K1	K2
BH4BAL	A		FVGXTU	A	E
BJFX28	A	E	G4L69U	A	E
BNP9Y9	A	E	G4M3G4	A	E
BQGXM	A	E	G8KM6Z	A	E
BVQDY6	A	E	GELXGK	A	E
BW6PWA	A	C*	GGC4T6	A	E
BWPGQU	A	E	GGPTY3	B	D
CA7MA9	A	E	GHNVQR	A	-- (see comments)
CKP8KX	A	E	GJV6RX	A	E
CVM9W2	A	E	GZQFQ2	A	E
CVMBNQ	A	E	H76NKB	A	E
D6BBWN	A	E	HJVHVJ	A	E
D6M3N6	A	E	HK7JJ4	A	E
D7GZT6	A	E	HN43JG	A	E
DJ8QWH	A	E	HUC3G2	A	E
DWBYRE	A	E	J2NXGT	A	E
E9LQVE	A	E	J3M28H	A	E
EC7NFN	A	E	J4ZHJB	A	E
EJ2VPG	A	E	JDZAPF	A	E
FC2QHX	A	E	JFA3XW	A	E
FDEAC3	A	E	K8FAA4	A	E
FDZUAM	A	E	KNY3X8	A	E
FF4GWZ	A	E	KQ6QBC	B	D
FJGAV6	A	E	KUPD96	A	E
FKUY3N	A	E	KYE62K	A	E
FL7H3L	A	E	KYF3AU	A	E
FUHV34	A	E	L7RNRW	A	C*

TABLE 1b- Signature on Q1

WebCode	Signature on Q1		WebCode	Signature on Q1	
	K1	K2		K1	K2
LC622W	A	E	RBNAZ2	A	E
LW7CKQ	A	E	RKABHW	A	E
LW7FCF	B	E	RYCXPR	A	E
MB36FR	A	E	T3RHJK	A	E
MCR99Y	B	D	T447TY	A	-
MD9LVB	A	E	T4KHDP	A	E
MK8TTX	A	E	T4QLBA	A	E
MLM4XH	A	E	TMG27Q	A	E
MYPQNNQ	A	E	TRTRU7	A	E
MZKEYA	A	E	UB7NVH	A	E
MZNUFG	A	E	UEDGGZ	A	E
NAM38X	A	E	ULXL7U	A	E
NGLJ3X	A	E	UXRTAQ	A	E
P8CHYN	A	E	V6QHQQV	A	E
PC7ELU	A	E	VJ9ELX	A	E
PG7EBQ	A	E	VU7FZM	A	E
PQQQHX	A	E	W3KEEY	A	E
PWFC6Q	A	E	WAJ4V3	A	E
Q4TJKU	A	E	WDEZAV	A	E
QFNUX8	A	E	WPA8DR	B	E
QKKGNA	A	E	WR2V3E	A	E
QKX2GK	A	E	WTUUBL	A	E
QKYXPU	A	E	WUNNPG	B	D
QNG8NU	A	E	WWBJAP	A	E
QTT7BL	A	E	XADAQM	A	E
R24MK7	A	E	XQFXXT	A	E
R3B9PX	A	E	XVDCKH	A	E

TABLE 1b- Signature on Q1

WebCode	Signature on Q1		WebCode	Signature on Q1	
	K1	K2		K1	K2
YJXXYV	A	E			
YLQJZY	A	E			
YPJT3K	A	E			
YTH7L3	A	E			
YW4THW	A	E			
YYA89B	A	E			
YYB4GL	A	E			
Z2WCXZ	A	E			
Z9B64P	A	E			
ZEG2NP	A	E			
ZHEKPN	A	E			

Response Summary Signature on Q1			Total Participants: 169
<i>Which, if any, of the known writers wrote the questioned signature on each of the questioned prescriptions?</i>			
Response	Signature on Q1		
	K1	K2	
A	159	0	<p>Note: The totals do not add up to the total number of participants because not all participants marked a response for all items or did not use provided key.</p> <p>Response Key:</p> <p>A: Was WRITTEN by; B: Was PROBABLY WRITTEN by (some degree of identification); C: CANNOT be IDENTIFIED or ELIMINATED; D: Was PROBABLY NOT WRITTEN by (some degree of elimination); E: Was NOT WRITTEN by.</p>
B	10	0	
C	0	2	
D	0	6	
E	0	150	

*See Conclusions (Table 2) and/or Additional Comments (Table 3).

TABLE 1b- Signature on Q2

WebCode	Signature on Q2		WebCode	Signature on Q2	
	K1	K2		K1	K2
22QFA8	C	C	7A43ZD	C	E
26LHML	E	E	7D743V	C	C
2G3YZM	D	C	7MT4CD	B	D
2KZKMJ	D	C	7TKADU	C	D
2UPCTN	C	C	7UQUTX	C	C
3B9JNK		C	82ACWG	C	E
3C4YZH	E	C	8BWBMM	C	C
3F9MKD	E	E	8D3TRA	E	E
3KWELF	D	C	8FB2WN	C	C
3M26RU	E	E	8MM6YG	E	E
3MN4GU	D	C	8URY2P	C	C
3PUN39	D	D	99PFJA	E	E
3PURUY	C	D	9B9EQD	A	E
3Q3TMK	E	C	9Q7C6V	C	C
3Z789H	C	C	9Q8AD6	C	C
4C3NHJ	B	X	9RZA7A	C	E
4E9YQG	A	E	9U2KWH	*	E
4NDWPH	D	C	9U38JN	C	C
4T72CU	C	C	A8M8PG	C	C
63NYGQ	C	C	AFZWQA	C	C
643JAZ	C	C	AXHZAG	*	C
644GHB	D	C	BAULWM	C	C
6ATUKY	B	D	BFWN49	C	C
6HJENC	D*	C	BH4BAL	C	C
6JHHE2	E	B	BJFX28	A	E
6LJNU8	D	C	BNP9Y9	C	E
7794VF	C	C	BQGXM	C	C

TABLE 1b- Signature on Q2

WebCode	Signature on Q2		WebCode	Signature on Q2	
	K1	K2		K1	K2
BVQDY6	C	C	GELXGK	D	D
BW6PWA	E*	C	GGC4T6	C	D
BWPGQU	C	C	GGPTY3	C	C
CA7MA9	E	C	GHNVQR	C	C
CKP8KX	C	C	GJV6RX	C	C
CVM9W2	E	E	GZQFQ2	D	D
CVMBNQ	C	C	H76NKB	C	D
D6BBWN	C	C	HJVHVJ	C	C
D6M3N6	C	E	HK7JJ4	C	C
D7GZT6	B	D	HN43JG	D	E
DJ8QWH	C	C	HUC3G2	E	E
DWBYRE	E	B	J2NXGT	C	C
E9LQVE	E	C	J3M28H	C	C
EC7NFN	C	C	J4ZHJB	C	C
EJ2VPG	C	D	JDZAPF	C	C
FC2QHX	E	E	JFA3XW	A	E
FDEAC3	C	E	K8FAA4	C	C
FDZUAM	E	E	KNY3X8	C	C
FF4GWZ	D	D	KQ6QBC	C	C
FJGAV6	C	C	KUPD96	C	C
FKUY3N	C	C	KYE62K	B	D
FL7H3L	C	C	KYF3AU	C	C
FUHV34	D	C	L7RNRW	E*	C
FVGXTU	E	C	LC622W	C	C
G4L69U	C	C	LW7CKQ	C	C
G4M3G4	C	C	LW7FCF	C	C
G8KM6Z	E	C	MB36FR	C	C

TABLE 1b- Signature on Q2

WebCode	Signature on Q2		WebCode	Signature on Q2	
	K1	K2		K1	K2
MCR99Y	C	C	T447TY	C	C
MD9LVB	D	C	T4KHDP	B	D
MK8TTX	D	E	T4QLBA	C	C
MLM4XH	C	C	TMG27Q	C	C
MYPQNNQ	D	B	TRTRU7	C	D
MZKEYA	D	C	UB7NVH	C	C
MZNUFG	B	D	UEDGGZ	E	C
NAM38X	E	C	ULXL7U	B	E
NGLJ3X	C	C	UXRTAQ	C	C
P8CHYN	C	C	V6QHQQV	C	C
PC7ELU	A	E	VJ9ELX	E	C
PG7EBQ	E	B	VU7FZM		D
PQQQHX	C	C	W3KEEY	C	C
PWFC6Q	D	B	WAJ4V3	C	C
Q4TJKU	C	E	WDEZAV	C	C
QFNUX8	D	C	WPA8DR	C	C
QKKGNA	C	D	WR2V3E	C	C
QKX2GK	C	C	WTUUBL	E	C
QKYXPU	C	C	WUNNPG	B	C
QNG8NU	A	E	WWBJAP	E	E
QTT7BL	D	B	XADAQM	C	C
R24MK7	D	C	XQFXXT	C	C
R3B9PX	E	C	XVDCKH	A	E
RBNAZ2	C	C	YJXXYV	C	D
RKABHW	A	E	YLQJZY	C	C
RYCXPR	B	D	YPJT3K	E	E
T3RHJK	E	E	YTH7L3	D	C

TABLE 1b- Signature on Q2

WebCode	Signature on Q2		WebCode	Signature on Q2	
	K1	K2		K1	K2
YW4THW	C	E			
YYA89B	C	C			
YYB4GL	C	C			
Z2WCXZ	C	D			
Z9B64P	D	C			
ZEG2NP	E	E			
ZHEKPN	D	D			

Response Summary Signature on Q2			Total Participants: 169
<i>Which, if any, of the known writers wrote the questioned signature on each of the questioned prescriptions?</i>			
Response	Signature on Q2		
	K1	K2	
A	8	0	<p>Note: The totals do not add up to the total number of participants because not all participants marked a response for all items or did not use provided key.</p> <p>Response Key:</p> <p>A: Was WRITTEN by; B: Was PROBABLY WRITTEN by (some degree of identification); C: CANNOT be IDENTIFIED or ELIMINATED; D: Was PROBABLY NOT WRITTEN by (some degree of elimination); E: Was NOT WRITTEN by.</p>
B	10	6	
C	92	106	
D	25	22	
E	30	34	

*See Conclusions (Table 2) and/or Additional Comments (Table 3).

Conclusions

TABLE 2

WebCode	Conclusions
22QFA8	1. The writer of the specimen handprinting and signatures on Exhibits K1(a to c) (Rachel Dougherty) wrote the questioned handprinting and "R Dougherty" signature on Exhibit Q1. 2. The writer of the specimen handprinting and signatures on Exhibits K2(a to c) (Richie Dougherty) wrote the questioned handprinting on Exhibit Q2. 3. No conclusion has been reached as to whether or not the writers of the specimen handprinting and signatures on Exhibits K1(a to c) and K2(a to c) wrote the questioned "R Dougherty" signature on Exhibit Q2.
26LHML	The questioned writing (excluding the signature) on the "Q1" questioned prescription was wrote by Raquel Dougherty "K1". The questioned writing (excluding the signature) on the "Q2" questioned prescription was wrote by Richie Dougherty "K2". The questioned signature on the "Q1" questioned prescription was wrote by Raquel Dougherty "K1". The questioned signature on the "Q2" questioned prescription was not wrote by Raquel Dougherty "K1" o Richie Dougherty "K2". [sic]
2G3YZM	A. It is highly probable that the writer of K1, Rachel Dougherty, wrote the content on the Q1 prescription form including the Name, Date and content. B. It is highly probable that the writer of K1, Rachel Dougherty, wrote the Prescriber Signature "RDougherty" on the Q1 prescription form. C. It is highly probable that the writer of K2, Richie Dougherty, wrote the content on the Q2 prescription form including the Name, Date and content. D. The Prescriber Signature on the Q2 prescription form was probably not written by the K1 writer, Rachel Dougherty. E. Richie Dougherty, K2 writer, cannot be identified or eliminated as the writer of the Q2 Prescriber Signature "R Dougherty". Examiner's Note: The Richie Dougherty K2 sample signatures are in cursive forms which approximate copybook forms. These are not comparable to the forms of the Q2 prescriber signature.
2KZKMJ	The questioned prescription Q1 including a text of 5 lines and a signature was written by only one person who is probably Rachel Dougherty (K1). The text of the questioned prescription Q2 was probably not written by Rachel Dougherty, but was probably written by Richie Dougherty. The signature of the questioned prescription Q2 was probably not written by Rachel Dougherty. We can't determine if Richie Dougherty is or isn't the writer of this signature.
2UPCTN	Rachel Dougherty (K1) is identified as the writer of the hand printing on Q1 and she is also identified as the author of the Q1 "R Dougherty" Prescriber signature. Rachel Dougherty (K1) did not write the hand printing on Q2. Some similarities and differences were observed in the comparison of Rachel Dougherty's Known writings with the Q2 questioned Prescriber Signature, however no conclusion is made at this time as to whether or not Rachel Dougherty wrote the questioned Q2 Prescriber's Signature. Additional course of business writing / hand printing specimens are requested of Rachel Dougherty to further compare to the Q2 questioned "R Dougherty" Prescriber Signature. Richie Dougherty (K2) is identified as the writer of the hand printing on Q2. No conclusion is made on the basis of the present evidence as to whether or not Richie Dougherty wrote the Q2 "R Dougherty" signature. Richie Dougherty did not fill out or sign Q1.
3B9JNK	Based on the examination and comparison of the question signature located on the 'Prescriber Signature' line of Q2 with the known writing of Rachel Dougherty & Richie Dougherty listed as K1 & K2, I find the following: I find that though there are similarities between the question and known writing/printing of Richie Dougherty there are differences that cannot be shown or explained. This signature is possibly a simulation by Richie Dougherty. It should be known that this examination is based on the examination from copies and not original documents.
3C4YZH	Based on my examination and findings, I am of the opinion that (i) The questioned writing on questioned prescription "Q1" was written by "Rachel Dougherty" and not by "Richie Dougherty". (ii) The questioned writing on questioned prescription "Q2" was written by "Richie Dougherty" and not by "Rachel Dougherty". (iii) The questioned signature on questioned prescription "Q1" was written by "Rachel Dougherty" and not by "Richie Dougherty". (iv) The questioned signature on questioned prescription "Q2" was not written by "Rachel Dougherty". However, I could not identify or eliminate "Richie Dougherty" as the writer of the questioned signature on questioned prescriptions "Q2".
3F9MKD	After a visual, microscopic and comparison examination, it was determined that: Rachel Dougherty (K1) wrote the questioned entries on Exhibit Q-1, including the signature. Rachel Dougherty (K1) did not write the questioned entries on Exhibit Q-2, including the signature. Richie Dougherty (K2) wrote the

TABLE 2

WebCode	Conclusions
	questioned entries on Exhibit Q-2, excluding the signature. Richie Dougherty (K2) did not write the questioned signature on Exhibit Q-2 or the questioned entries on Exhibit Q-1, including the signature.
3KWELF	a. Dr. Rachel Dougherty wrote the prescription Q-1 (excluding the signature). b. Dr. Rachel Dougherty wrote the "R. Dougherty" signature on prescription Q-1. c. Richie Dougherty wrote (printed) prescription Q-2 (excluding signature). d. Richie Dougherty cannot be identified or eliminated as the writer of "R. Dougherty" signature on Q-2 (see additional comments)*. e. Dr. Rachel Dougherty probably did not write "R. Dougherty" signature on Q-2.
3M26RU	The questioned texts were written by two different persons. One person wrote the text on document Q1, the other one on document Q2. At this stage of analyses we cannot ascertain how many persons wrote questioned signatures. The graphic and comparative examination showed that the questioned handwriting on item Q1 - text and signature - was written by Rachel Dougherty, whose samples K1a-c were examined. The questioned text on item Q2 was written by Richie Dougherty, whose samples K2a-c were examined. The questioned signature on item Q2 was written by another person (neither Rachel Dougherty nor Richie Dougherty).
3MN4GU	Rachel Dougherty wrote the questioned hand printing and signature on Item Q1. This opinion is based on the notation of significant similarities and no differences between the writings submitted. Rachel Dougherty did not write the questioned hand printing on Item Q2. This opinion is based on the notation of significant differences between the writings submitted. Rachel Dougherty probably did not write the questioned signature on Item Q2. This opinion is based on the notation of differences and few similarities between the writings submitted. Richie Dougherty wrote the questioned hand printing on Item Q2. This opinion is based on the notation of significant similarities and no differences between the writings submitted. No conclusion could be reached as to whether or not Richie Dougherty wrote the questioned signature on Item Q2. This opinion is based on the lack of signature standards composed of mainly hand printed characters.
3PUN39	We would draw up pairs of mutually exclusive hypotheses for all comparisons to be made (text on Q1 with K1, text on Q1 with K2, signature on Q1 with K1, signature on Q1 with K2 and same series for Q2). In our conclusions we don't give an opinion on the probability of these hypotheses, but on the probability of our findings (results of each comparison) in the light of the (typically two) hypotheses. We use the following "scale" of conclusions if we can give an opinion at all: The results of the comparative handwriting examination are: about equally probable...; slightly more probable...; more probable...; much more probable...; very much more probable... when hypothesis H1 is correct as/than when hypothesis H2 is correct. The limited space here does not allow us to work out all conclusions in the wording we use, but these are consistent with the responses given at 1 and 2. The (negative) conclusion for the signature on Q2 would be somewhat less strong for K2 than[sic] for K1, however (between C and D, but closer to D).
3PURUY	The questioned hand printing and signature on item Q-1 were compared to the known writing of Rachel Dougherty (K-1a through K-1c). Significant similarities and no differences were observed. Rachel Dougherty is identified as the writer of the questioned hand printing and signature on item Q-1. The questioned hand printing on item Q-2 was compared to the known writing of Rachel Dougherty (K-1a through K-1c) and Richie Dougherty (K-2a through K-2c). Significant similarities and no differences were observed between the hand printing and the known writing of Richie Dougherty. Richie Dougherty is identified as the writer of the questioned hand printing on item Q-2. The questioned signature on item Q-2 was compared to the known writing of Rachel Dougherty (K-1a through K-1c). Some similarities in letter forms were observed. Differences in spacing and size were also observed. I am unable to determine whether or not Rachel Dougherty wrote the questioned signature on item Q-2. The questioned signature on item Q-2 was compared to the known writing of Richie Dougherty (K-2a through K-2c). Several significant differences were observed. Richie Dougherty very probably did not write the questioned signature on item Q-2.
3Q3TMK	a. The questioned writing (excluding the signature) on Q1 was written by Rachel Dougherty; b. The questioned writing (excluding the signature) on Q2 was written by Richie Dougherty; c. The questioned signature on Q1 was written by Rachel Dougherty; d. The questioned signature on Q2 was not written by Rachel Dougherty; e. The questioned signature on Q2 can not be identified or eliminated by Richie Dougherty.

TABLE 2

WebCode	Conclusions
3Z789H	1. The writer of Items K-1 (a-c) highly probably executed the hand printing and signature appearing on Item Q-1. 2. The writer of Items K-2(a-c) executed the hand printing appearing on Item Q-2. 3. There are indications that this same writer may not have executed the "R Dougherty" signature on Item Q-2, but the evidence is far from conclusive. Additional samples of Richie Dougherty's cursive writing are requested for comparison. 4. The questioned "R Dougherty" on Item Q-2 contained some features similar to and some features different from those in the known Rachel Dougherty signatures. There wasn't sufficient evidence to determine if the questioned signature was demonstrative of an alternative style, disguise, or a product of a different writer. For this reason, the writer of Items K-1 (a-c) cannot be identified or eliminated as having executed this questioned signature. Additional samples of Rachel Dougherty's signature are requested for comparison.
4C3NHJ	Rachel Dougherty (K1) wrote the questioned text and prescriber signature on Exhibit Q1. There are also indications that Rachel Dougherty (K1) wrote the prescriber signature on Exhibit Q2. This portion of the examination was limited by the general features of the Exhibit Q2 prescriber signature and the lack of specimen signatures that reflect the entire design of the Exhibit Q2 prescriber signature. Richie Dougherty (K2) wrote the questioned text on Exhibit Q2.
4E9YQG	It certainly uniprocudente the writings of Q1 with the pattern material K1 a-c, because of the identity grafonomoca found. It esdcritos uniprocudente doubt the Q2 to K2 BC by material pattern present aspects grafonomicos consistent. The signatures observed in the two question papers Q1 and Q2 were prepared by who provided the samples K1 ac. [sic]
4NDWPH	Rachel Dougherty: She wrote the text and signed her name on the Caty Vans prescription dated June 5, 2011 (Exhibit Q1). She did not write the text of the Tom Diggs prescription dated July 16, 2011 (Exhibit Q2). There are indications she may not have signed her name on to the Tom Diggs prescription dated July 16, 2011 (Exhibit Q2); however, the evidence falls short of that needed for a more definitive finding. Richie Dougherty: He filled out the text of the Tom Diggs prescription dated July 16, 2011 (Exhibit Q2). No conclusion could be made as to whether or not he signed his mother's name onto the Tom Diggs prescription (Exhibit Q2).
4T72CU	The bodywritings on both questioned documents consist of relatively short, disconnected entries. If considered separately, some of these entries lacked sufficient individuating character for an opinion of authorship to be reached. Given the notational nature of some of these entries, the possibility that more than one writer has been involved in completing the bodywritings on each document cannot be completely excluded. However, there is no evidence that this has occurred. On this basis, it is my opinion that the author of the specimens attributed to Rachel Dougherty (K1) has completed the bodywritings and signature on the questioned document Q1. Similarly on this basis, it is my opinion that the author of the specimens attributed to Richie Dougherty (K2) has completed the bodywritings on the questioned document Q2. The 'R Dougherty' signature on the questioned document Q2 does not closely follow the signature style seen in the specimens attributed to Rachel Dougherty. It is not possible to determine whether a direct attempt has been made to simulate the signature style seen in the specimens attributed to Rachel Dougherty. Accordingly, no opinion regarding authorship of this signature has been possible.
63NYGQ	1. The manuscripts of the prescription Q1 allow stablishing[sic] a graphic identity with the known writings K1a, K1b and K1c manuscripts of Mrs Rachel Dougherty. 2. Q2, excluding the signature, has graphic identity with known writings of doctor's son, Richie Dougherty. 3. The signature of prescription Q2 can not be identified or eliminated as belonging to Mrs. Rachel Dougherty or to Mr. Richie Dougherty, it hasn't enough graphic identity with the known writings.
643JAZ	Rachel Dougherty authored the Q1 prescription and signature. Richie Dougherty authored the hand printed prescription on Q2. Neither Rachel Dougherty nor Richie Dougherty can be identified or eliminated as the author of the Q2 signature. There are inconsistencies between the Q2 signature and the known writings of both Rachel Dougherty and Richie Dougherty. However, it cannot be dertemined[sic] if these inconsistencies are due to disguise, an attempt to imitate the true writing of Rachel Dougherty, or due to another writer. Some additional known signatures (in the name of "R Dougherty[sic]) from all parties involved may help in a supplemental examination.
644GHB	Rachel Dougherty (K1) is identified as the writer of the questioned entries on Exhibit Q1. Rachel

TABLE 2

WebCode	Conclusions
	Dougherty (K1) cannot be associated with the questioned entries on Exhibit Q2. Excellent similarities were noted between the know[sic] writing of Richie Dougherty (K2) and the questioned entries on Exhibit Q2; however, unresolved discrepancies were also present which preclude an identification.
6ATUKY	1. Rachel Dougherty wrote the questioned entries on Exhibit 1. She also probably wrote the signature on Exhibit 2. This finding is limited due [sic] the insufficient amount of standards by Rachel Dougherty submitted for examination. 2. Richie Dougherty wrote the remaining questioned entries on Exhibit 2. Richie Dougherty probably did not write the signature on Exhibit 2. This finding is limited due [sic] the insufficient amount of standards by Richie Dougherty submitted for examination.
6HJENC	The Q1 prescription and Prescriber Signature were written by the writer of the K1 samples. The Q2 prescription was written by the writer of the K2 samples. No opinion could be offered as to whether or not the printed Q2 Prescriber Signature was written by either of the writers in the submitted K1 or K2 samples. Submission of printed samples from the K1 and K2 writers of the "R. Dougherty" signature found on Q2 may be of value for further comparison purposes.
6JHHE2	Handwriting: It is my opinion that: 1. There is very strong support for the proposition that the questioned handwriting on the prescription, Q1, was written by the writer of the Rachel Dougherty writing specimens, K1a-c. 2. There is very strong support for the proposition that the questioned handwriting on the prescription, Q2, was written by the writer of the Richie Dougherty writing specimens, K2a-c. Signatures: It is my opinion that: 1. There is very strong support for the proposition that the questioned signature on the prescription, Q1, was written by the writer of the Rachel Dougherty writing specimens, K1a-c. 2. There is qualified support for the proposition that the questioned signature on the prescription, Q2, was written by the writer of the Richie Dougherty writing specimens, K2a-c.
6LJNU8	It is highly probable that sample Q1, both handwriting and signature are written by Rachel Dougherty (K1) and it is highly probable that they are not written by Richie Dougherty (K2). It is highly probable that handwriting in sample Q2 is written by Richie Dougherty[sic] (K2) and it is highly probable that it is not written by Rachel Dougherty (K1). There are indications that Rachel Dougherty (K1) has not written the signature in sample Q2. No conclusion could be made if Richie Dougherty (K2) has written the signature in sample Q2, or not.
7794VF	Upon completion of an examination and comparison of the exhibits submitted in this case, this examiner has reached the following opinions: The K-1 writer did write the questioned text and signature appearing on the Q-1 exhibit. The K-2 writer did write the questioned text, excluding the signature, appearing on the Q-2 exhibit. Due to variations present that cannot be reconciled between the Q-2 questioned signature and the available standards, neither the K-1 nor the K-2 writer can be identified or eliminated regarding authorship.
7A43ZD	From the examinations performed on the documents submitted to us, and based on the comparative documents K1 (a, b and c) and K2 (a, b and c), we can conclude that: The writing and signature on the Questioned document Q1 were written by Mrs Rachel Dougherty. The writing on the Questioned document Q2 was written by Mr Richie Dougherty. The signature on the questioned document Q2 was not written by Mr. Richie Dougherty. Mrs Rachel Dougherty is neither identified nor eliminated as the writer of the signature on the Questioned document Q2. More comparison documents and observation of the originals are needed.
7D743V	It was determined that the writing on item Q1, including the signature, was prepared by the writer of item K1a-K1c. It was determined that the writing on item Q2, excluding the signature, was prepared by the writer of item K2a-K2c. Due to the presence of unexplained characteristics, limited quantity of undictated known signatures, and limited comparability with K2a-K2c, no conclusion could be reached whether the Q2 signature was prepared by the writer of K1a-K1c or the writer of K2a-K2c.
7MT4CD	Based on morphological characteristics matching put in evidence, we conclude that firms preliminary Q1 and Q2 and Q1 written content are identified with the known manuscripts grafonomicamente K1, so the same content manuscripts Q2 manuscripts are identified K2 known. This limitation to the lack of originality of the documents discussed many issues as certain. [sic]
7TKADU	Results: It was determined that item Q1 text and signature was prepared by Rachel Dougherty, the writer of item K1. It was determined that the item Q2 text was prepared by Richie Dougherty, the writer of item

TABLE 2

WebCode	Conclusions
	K2. A definite determination could not be reached whether Rachel Dougherty, K1, or Richie Dougherty, K2, prepared the signature on item Q2 due to variations that could not be explained on the basis of the available known writing. However, characteristics were observed that indicate Richie Dougherty, K2, may not have prepared the item Q2 signature. If future examinations are desired, dictated and undictated known writing should be obtained from Rachel Dougherty, Richie Dougherty, and any other logical suspect(s). The known writing should be comparable to the questioned signatures. Dictated known writing should be obtained on separate forms similar to the questioned specimens, and each should be removed from the writer's view upon completion. Numerous repetitions may be necessary in order to obtain naturally prepared writing. Undictated known writing consists of handwriting prepared during normal course of business activity. Possible sources of undictated known writing include business papers, letters, canceled checks, and/or applications.
7UQUTX	I compared the extended writing and the signature of each prescription with the known writings of Rachel Dougherty and Richie Dougherty. I found many similarities between the writing of prescription Q1 and the writing of Rachel Dougherty. No single similarity is conclusive but the combination of similarities leads me to conclude that the prescription Q1 was written by Rachel Dougherty. The signature of the prescription Q1 has been written fluently and shows no unnatural pen-lifts, hesitations or tremor. It is similar in general appearance and in detail to the genuine signatures of Rachel Dougherty. My observations lead me to conclude that the signature of prescription Q1 was written by Rachel Dougherty. I found many similarities between the writing of prescription Q2 and the writing of Richie Dougherty. No single similarity is conclusive but the combination of similarities leads me to conclude that the prescription Q2 was written by Richie Dougherty. 6. The signature of the prescription Q2 has been written fluently and shows no sign of being a simulation. It differs from the genuine signatures of Rachel Dougherty in general appearance and in some detail. It shows some similarity to the writing of Richie Dougherty but differences also are present. My observations do not enable me to ascribe the writing of the Q2 signature to either Rachel or Richie Dougherty.
82ACWG	The writing in question Q1, is identified with the writings K1a, K1b, K1c. The writing in question Q2, is identified with the writings K2a, K2b, K2c. The signature in Q1, is identified with K1a, K1b and K1c. The signature in Q2 cannot be identified or eliminated.
8BWBMM	Results of Examinations: It was determined that the questioned writing on Item Q1 was prepared by Rachel Dougherty, writer of Item K1a-K1c. It was determined that the questioned hand printing on Item Q2 was prepared by Richie Dougherty, writer of Item K2a-K2c. No conclusion could be reached whether the questioned signature on Item Q2 was or was not prepared [sic] Rachel Dougherty, Item K1a-K1c, or Richie Dougherty, Item K2a-K2c, due to a lack of sufficient comparability.
8D3TRA	It is my conclusion Rachel Dougherty (K1) completed the text and signature on the prescription listed as Q1. With the exception of the prescriber signature, it is my conclusion Richie Dougherty (K2) completed the hand printed text on Q2. Richie Dougherty is eliminated as the writer of the prescriber signatures on Q1 and Q2. Rachel Dougherty is eliminated as the writer of the text and the prescriber signature on Q2.
8FB2WN	It was determined the prescription including the signature "R Dougherty", Q-1, was written by Rachel Dougherty, K-1. It was also determined the prescription excluding the signature "R Dougherty", Q-2, was written by Richie Dougherty, K-2. There was not a basis for identifying the signature "R Dougherty", in Q-2 as being written by Rachel Dougherty, K-1 or Richie Dougherty, K-2. The signature is a combination of both handwriting and hand printing and not suitable for comparison.
8MM6YG	Rachel Dougherty wrote both the questioned writing and the signature of the questioned prescription Q1. Richie Dougherty wrote the questioned writing (excluding signature) of the questioned prescriptions Q2. Neither Rachel nor Richie Dougherty wrote the questioned signature or the questioned prescriptions Q2.
8URY2P	Dr. Rachel Dougherty (K1) was the writer of the hand printing and the signature on the reproduction copy of the questioned prescription dated June 5, 2011 in Item Q1. Dr. Rachel Dougherty (K1) was probably not the writer of the hand printing on the reproduction copy of the questioned prescription dated July 16, 2011 in Item Q2. Dr. Rachel Dougherty (K1) could not be identified to nor eliminated from being the writer of the signature on the reproduction copy of the questioned prescription dated July 16, 2011 in Item Q2. Richie Dougherty (K2) was probably not the writer of the hand printing on the reproduction copy of the questioned prescription dated June 5, 2011 in Item Q1. Richie Dougherty (K2) was not the

TABLE 2

WebCode	Conclusions
	writer of the signature on the reproduction copy of the questioned prescription dated June 5, 2011 in Item Q1. Richie Dougherty (K2) was the writer of the hand printing on the reproduction copy of the questioned prescription dated July 16, 2011 in Item Q2. Richie Dougherty (K2) could not be identified to nor eliminated from being the writer of the signature on the reproduction copy of the questioned prescription dated July 16, 2011 in Item Q2.
99PFJA	The questioned writing (excluding signature) of the Q1 was written by Rachel Dougherty. The questioned writing (excluding signature) of the Q2 was written by Richie Dougherty. The signature on the Q1 was written by Rachel Dougherty. The signature on the Q2 was not written by Rachel Dougherty. The signature on the Q2 was not written by Richie Dougherty.
9B9EQD	[No Conclusions Reported.]
9Q7C6V	1. The writer of the specimen handprinting and signature on Exhibit K-1(a-c) (Rachel Dougherty) wrote the questioned handprinting and signature on Exhibit Q-1. 2. The writer of the specimen handprinting Exhibit K-2(a-c) (Richie Dougherty) wrote the questioned handprinting on Exhibit Q-2. 3. No conclusions have been reached as to whether or not the writers of the specimen signatures on Exhibits K-1(a to c) and K-2(a to c) wrote the questioned signature on Exhibit Q-2 (see Additional Comments).
9Q8AD6	Rachel Dougherty wrote (i.e. a full identification) all of the questioned hand printed body entries and the "R Dougherty" prescriber signature on Item Q1. Richie Dougherty wrote all of the questioned hand printed body entries on Item Q2. Rachel Dougherty and Richie Dougherty can neither be identified nor eliminated as the writer of the "R Dougherty" prescriber signature on Item Q2, however some dissimilarities were noted to both of their known writings. Limiting factors included the copy quality, small quantity of questioned writing and lack of directly comparable known writings.
9RZA7A	The writer K1 wrote the questioned writing & signature on Q1. The writer K2 wrote the questioned writing on Q2. The writer K1 cannot be identified or eliminated for the signature on Q2; more specimen is needed of natural writing & signatures.
9U2KWH	The Questioned prescription dated June 5, 2011 was written by Rachel Dougherty (k1). The Questioned prescription dated July 16, 2011 was written by Richie Dougherty (k2). The Questioned signature on the prescription dated June 5, 2011 was written by Rachel Dougherty (k1). The Questioned signature on the prescription dated July 16, 2011 was neither written by Rachel Dougherty (k1) nor by Richie Dougherty (k2).
9U38JN	It was determined that the prescription, Q1, including the signature, was written by Rachel Dougherty, K1. It was determined that the prescription, Q2, excluding the signature, was written by Richie Dougherty, K2. There was not a basis for identifying or eliminating Rachel Dougherty, K1, and Richie Dougherty, K2, as the writer of the signature on the prescription, Q2.
A8M8PG	The writer of K-1 was identified to have written + signed Q-1. The writer of K-2 was identified to have written Q-2. The writers of K-1 and K-2 could not be identified or eliminated as the signer of Q-2.
AFZWQA	The K1 writer (Rachel Dougherty) wrote all of the questioned entries on Exhibit Q1. The K2 writer (Richie Dougherty) wrote the questioned entries, excluding the signature, on Exhibit Q2. Neither the K1 writer nor the K2 writer can be identified or eliminated from writing the signature on Exhibit Q2. Additional exemplars of comparable cursive or printed signatures would have to be submitted in order to conduct a further comparison.
AXHZAG	The available documents provided conclusive evidence to support the proposition that Rachel Dougherty completed the text of prescription Q1. Further, there was very strong evidence to support the proposition that Rachel Dougherty signed Q1. The available documents provided conclusive evidence to support the proposition that Richie Dougherty completed the text of prescription Q2. The evidence to whether or not Rachel Dougherty or Richie Dougherty signed Q2 was inconclusive.
BAULWM	I have examined the disputed writings and signatures and have compared them with the specimen material attributed to Rachel Dougherty and Richie Dougherty. The disputed writing + signature on the document Q1 corresponds closely to the specimens from Rachel Dougherty and, in my opinion, there is strong evidence to support the proposition that she is the writer. The disputed writing on the document Q2 is similar to the specimens from Richie Dougherty and, in my opinion, the evidence would support the

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WebCode	Conclusions
	proposition that he is the writer. It is not possible to determine if Rachel or Richie Dougherty wrote the disputed signature on document Q2.
BFWN49	Writer K1 (Rachel Dougherty) wrote Item Q1 including the signature. Writer K2 (Richie Dougherty) wrote the non-signature entries on Item Q2. Neither writer K1 nor K2 can be identified or eliminated as the writer of the signature entry on Item Q2. The absence of adequate comparability between the manuscript style questioned signature and the cursive samples submitted prevented any meaningful comparison.
BH4BAL	It was determined that Q-1 was written and signed by Rachel Dougherty, K1a-c. It was determined that Q-2 (except for the signature) was written by Richie Dougherty, K-2a-c. There was not a basis for identifying either Rachel Dougherty, K1a-c, or Richie Dougherty, K-2a-c, as the writer of the signature on Q-2.
BJFX28	It certainly uniprocendente the writings of Q1 with the pattern material K1a-c, because of the identity grafonomica found. It esdcritops uniprocendente doubt the Q2 to K2 BC by material pattern present aspects grafonomicos consistent. The signatures observed in the two question papers Q1 and Q2 were prepared by who provided the samples K1 ac. [sic]
BNP9Y9	Based on the optical, analytical and comparative examinations performed on the submitted items, and on the known writings and signatures presented as having been written by Rachel Dougherty and Richie Dougherty, we conclude the following: The questioned writings on item Q1 were written by Rachel Dougherty. The questioned writings on item Q2 were written by Richie Dougherty. The questioned signatures on item Q1 were written by Rachel Dougherty. Rachel Dougherty cannot be identified or eliminated as the writer of the questioned signature on item Q2. The questioned signature on item Q2 was not written by Richie Dougherty.
BQGXUM	It is the conclusion of this examiner that the Item 1/Q1 prescription and signature was written by the writer of Item 3/K1, which was submitted as the known writing of Rachel Dougherty. Also, the Item 2/Q2 name and prescription information was written by the writer of Item 4/K2, which was submitted as the known writing of Richie Dougherty. No conclusion could be reached regarding the signature on Item 2/Q2 due to the simplicity of the questioned signature, the simplicity of the known writings, limited amount of known writings, and similarities and differences with the known writings. All submitted items are photographic images of the written material presented for comparison.
BVQDY6	In as much as it is possible to examine color images in lieu of the original documents, it is my opinion that: Rachel Dougherty (K1) wrote the questioned text and signature on Q1. Richie Dougherty (K2) wrote the questioned written text on Q2. The questioned signature on Q2 can neither be identified nor eliminated with the known writing of Rachel Dougherty (K1) and Richie Dougherty (K2). Limitations associated with the comparability of the printing within the signature precludes a more conclusive opinion.
BW6PWA	The Q.1 prescription was prepared by the K.1 writer including the signature. The Q.2 prescription was prepared by the K.2 writer excluding the signature. No-conclusion is rendered concerning the signature R Dougherty on the Q.2 prescription.
BWPGQU	1) Inter-comparison examination between the Questioned handwriting appearing on Q1 and the (reported) Known handwriting and handwriting exemplars provided by Richie Dougherty contained in K2a through K2c, revealed numerous dissimilarities in class and individual handwriting characteristics and habits. Based upon the dissimilarities noted it is the opinion of this examiner that the Questioned handwriting appearing on Q1 was not authored by Richie Dougherty. 2) Inter-comparison examination between the Questioned handwriting appearing on Q1 and the (reported) Known handwriting and handwriting exemplars provided by Rachel Dougherty contained in K1a through K1c, revealed numerous similarities in class and individual handwriting characteristics and habits. Based upon the similarities noted it is the opinion of this examiner that the Questioned handwriting appearing on Q1 was authored by Rachel Dougherty. 3) Inter-comparison examination between the Questioned "R Dougherty" signature appearing on Q1 and the "R Dougherty" signature exemplars provided by Richie Dougherty contained in K2a through K2c, revealed numerous dissimilarities in class and individual handwriting characteristics and habits. Based upon the dissimilarities noted it is the opinion of this examiner that the Questioned "R Dougherty" signature appearing on Q1 was not authored by Richie Dougherty. 4) Inter-comparison examination between the Questioned "R Dougherty" signature appearing on Q1 and the "R Dougherty" signature exemplars provided by Rachel Dougherty contained in K1a through K1c, revealed numerous

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	<p>similarities in class and individual handwriting characteristics and habits. Based upon the similarities noted it is the opinion of this examiner that the Questioned "R Dougherty" signature appearing on Q1 was authored by Rachel Dougherty. 5) Inter-comparison examination between the Questioned handwriting appearing on Q2 and the (reported) Known handwriting and handwriting exemplars provided by Rachel Dougherty contained in K1a through K1c, revealed numerous dissimilarities in class and individual handwriting characteristics and habits. Based upon the dissimilarities noted it is the opinion of this examiner that the Questioned handwriting appearing on Q2 was not authored by Rachel Dougherty. 6) Inter-comparison examination between the Questioned handwriting appearing on Q2 and the (reported) Known handwriting and handwriting exemplars provided by Richie Dougherty contained in K2a through K2c, revealed numerous similarities in class and individual handwriting characteristics and habits. Based upon the similarities noted it is the opinion of this examiner that the Questioned handwriting appearing on Q2 was authored by Richie Dougherty. 7) The Questioned "R Dougherty" signature appearing on Q2 was authored in print style writing. The "R Dougherty" signature exemplars provided by Rachel Dougherty and Richie Dougherty appearing on K1a thru K1c and K2a through K2c (respectively) were authored in cursive style writing. The differences in styles of writing precludes conducting inter-comparison examination. Thus neither Rachel Dougherty or Richie Dougherty can be identified or eliminated as being the author of this Questioned "R Dougherty" signature appearing on Q2.</p>
CA7MA9	<p>1. Rachol Dougherty is writer for the words on the documents Q1 and the signatures also. 2. Richie Dougherty is writer for the words of documents Q2 only. 3. Rachol Dougherty didn't write the signature in the document Q2 because it is aforged signature and it can not be attributed to Richie Dougherty or any other person. [sic]</p>
CKP8KX	<p>1. The writer of the specimen handwriting/signature on K1a-c did write the questioned handwriting/signature on Q1. 2. The writer of the specimen handwriting/signature on K2a-c did write the questioned handwriting on Q2. 3. The authorship of the questioned signature on Q2 is inconclusive, i.e., cannot identify or eliminate the writer of the specimen handwriting/signature on K1a-c; K2a-c being the writer of the questioned signature on Q2. Note: The above opinions expressed are based on the proviso the non original documents K1a-c; K2a-c, Q1 and Q2 are true and accurate representation[sic] of the original documents.</p>
CVM9W2	<p>Concerning the written element of the questionned prescription dated June 5 2011 was written by the author of the comparison writing samples quoted K1a, K1b et K1c. Concerning the written element of the questionned prescription dated July 16 2011 was written by the author of the comparison writing samples quoted K2a, K2b et K2c. Concerning the signature of the questionned prescription dated June 5 2011 was performed by the author of the comparison writing samples quoted K1a, K1b et K1c. Concerning the signature of the questionned prescription dated July 16 2011 was no performed by the author of the comparison writing samples quoted K1a, K1b et K1c, and the author of the comparison writing samples quoted K2a, K2b et K2c. [sic]</p>
CVMBNQ	<p>Exhibits: 1 - Photograph of prescription for Caty Vans, dated "5 June 11" (Q1); 2 - Photograph of prescription for Tom Diggs, dated "7/16/11" (Q2); 3(1-3) - Known handwriting of Rachel Daugherty (K1a-c); 4(1-3) - Known handwriting of Richie Dougherty (K2a-c). Results of Examination: 1. This report is based upon the examination of photographs of all of the submitted documents, Exhibits 1-4. It is assumed that these are true and accurate copies of the original documents within the capabilities (e.g., creation of otherwise non-existent documents) and limitations (e.g., reproduction of size and color) of the reproduction process(es) involved. Should the original documents become available, a re-examination of the documents and re-evaluation of the opinions expressed in this report are warranted. 2. Rachel Daugherty wrote all of the entries depicted in the photograph of the prescription for Caty Vans, dated "5 June 11", Exhibit 1. 3. Richie Daugherty wrote the entries, less the "R Dougherty" signature, depicted in the photograph of prescription for Tom Diggs, dated "7/16/11", Exhibit 2. 4. Neither Rachel Daugherty nor Richie Daugherty could be eliminated or identified as the writer of the "R Dougherty" signature, depicted in the photograph of prescription for Tom Diggs, dated "7/16/11", Exhibit 2. This signature is a mixture of hand printing and handwriting, while the submitted handwriting of both individuals does not demonstrate this characteristic. The submission of extensive, additional course-of-business writings may result in a more definitive opinion. [sic]</p>
D6BBWN	<p>It was determined that the questioned writing and signature on Item Q1 was written by Rachel Dougherty,</p>

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	writer of Item K1. It was determined that the questioned writing on Item Q2, excluding signature, was written by Richie Dougherty, writer of Item K2. A definite determination could not be reached whether Rachel Dougherty, Item K1, or Richie Dougherty, Item K2, prepared the questioned signature on Item Q2, due to the presence of characteristics in the questioned signature that are not accounted for in the available known writing, inconsistencies observed, and lack of sufficiently comparable known writing.
D6M3N6	It was determined that Rachel Dougherty /writer of K1/ prepared the questioned writing and signature of item Q1. Richie Dougherty /writer of K2/ wrote the writing on the questioned prescription Q2, but he didn't write the signature. Rachel Dougherty /K1/ cannot be identified or eliminated as the writer of the questioned signature on item Q2.
D7GZT6	Grafonomic aspects of manuscripts observed in Q1 including the signature, retain complete identity with those reported in samples K1 a, b, c, so they are written by the same person. The manuscript of the formula Q2 identity with the manuscripts preserved in the samples provided K2 a, b, c. The firm has seen in Q2 certain identity with manuscripts K1 a, observed b, c, is likely that Rachel has signed these documents at a time before wite. [sic]
DJ8QWH	1. The writing in question Q1, excluding the signature, is identified with the known writings of Mrs Rachel Dougherty. 2. The signature of prescription Q1 has graphic identify with the samples written by Mrs. Rachel Dougherty. 3. The writing in question Q2, excluding the signature, is identified fully with the known writings of Mr. Richie Dougherty. 4. The signature of prescription Q2 can not be identified or eliminated; it has handwriting features with characteristics of both the Rachel Dougherty's signature and the Richie Dougherty's signature.
DWBYRE	Q1 was written and signed by Rachel (K1). Q2 was written by Richie (K2). Q2 was probably signed by Richie (K2).
E9LQVE	For A or E: Findings strongly support the proposition that the questioned text (signature) was (not) written by K1 (or K2). Therefor it is our assessment that the author of the questioned text (signature) was (not) K1 (or K2). For C: Inconclusive. Comparing questioned and comparison material we found differences and similarities. Therefore it is impossible to asses weather materials were or were not written by the same person. [sic]
EC7NFN	Examination and comparison of questioned items #Q1 and #Q2 with known items #K1a-#K1c and #K2a-#K2c resulted in the following conclusions: It is the opinion of the undersigned that the questioned writing on item #Q1 was written by the writer of item #K1a-K1c, Rachel Dougherty. It is the opinion of the undersigned that the non-signature portion of item #Q2 was written by the writer of item #K2a-K2c, Richie Dougherty. Neither writer can be identified nor eliminated as the signer of the questioned signature on item #Q2. If additional known course-of-business signatures from both Rachel Dougherty and Richie Dougherty become available, further examination would be warranted.
EJ2VPG	The copy of the prescription dated June 5, 2011, referred to as Q1, was authored by the writer of the known writings of Doctor, Rachel Dougherty, referred to as K1. It is highly probable that the writer of the known writings of Doctor's son, Richie Dougherty, referred to as K2, authored the body of the copy of the prescription dated July 16, 2011, referred to as Q2. The body of the copy of the prescription dated July 16, 2011, referred to as Q2, was probably not authored by the writer of the known writings of Doctor, Rachel Dougherty, referred to as K1. The signature on the copy of the prescription dated July 16, 2011, referred to as Q2, was probably not authored by the writer of the known writings of Doctor's son, Richie Dougherty, referred to as K2. The writer of the known writings of Doctor, Rachel Dougherty, referred to as K1, could not be identified or eliminated as the author of the signature on the copy of the prescription dated July 16, 2011, referred to as Q2.
FC2QHX	1. The questioned writing and signature on the Q1 prescription was written by Rachel Dougherty (K1 a-c). 2. Excluding the signature, the questioned writing on the Q2 prescription was written by Richie Dougherty (K2a-c). 3. The questioned signature on the Q2 prescription was not written by either Rachel Dougherty (K1 a-c) or Richie Dougherty (K2a-c).
FDEAC3	3.1. There is very strong support for the proposition that the questioned handwriting and signatures appearing on the log-in forms Q1 was written by the writer of the comparison Rachel Dougherty samples. 3.2. There is very strong support for the proposition that the handwriting appearing on the questioned

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	log-in form Q2 was written by the writer of the comparison Richie Dougherty handwriting sample. 3.3. There is very strong support for the proposition that the signature appearing on the questioned log-in form Q2 was not signed by the writer of the comparison Richie Dougherty sample. 3.4. No opinion can be expressed as to Rachel Dougherty was or was not the authorship of the signature appearing on the questioned log-in form Q2. [sic]
FDZUAM	Handwriting Comparison: 1. The questioned handwriting on the questioned prescription in item Q1 was examined and compared with the control handwriting specimens written by Doctor Rachel Dougherty in items K1a-c and the doctor's son Richie Dougherty in items K2a-c respectively. 2. Similarities in characteristic writing features such as marginal habit, relative size of the handwriting, design and construction of letters/numerals, proportion of elements of letters and connection of letters were found between the questioned handwriting on the prescription in item Q1 and the control handwriting specimens written by Doctor Rachel Dougherty in items K1a-c. In view of the above findings, I am of the opinion that the questioned handwriting on the prescription in item Q1 was written by Doctor Rachel Dougherty. 3. The questioned handwriting on the questioned prescription in item Q2 was examined and compared with the control handwriting specimens written by Doctor Rachel Dougherty in items K1a-c and the doctor's son Richie Dougherty in items K2a-c respectively. 4. Similarities in characteristic writing features such as marginal habit, relative size of the handwriting, design and construction of letters/numerals, and connection of letters were found between the questioned handwriting on the prescription in item Q2 and the control handwriting specimens written by the doctor's son Richie Dougherty in items K2a-c. In view of the above findings, I am of the opinion that the questioned handwriting on the prescription in item Q2 was written by the doctor's son Richie Dougherty. Signature Comparison: 5. The questioned signature on the questioned prescription in item Q1 was examined and compared with the control signature specimens written by Doctor Rachel Dougherty in items K1a-c and the doctor's son Richie Dougherty in items K2a-c respectively. 6. Similarities in characteristic writing features such as structural design and connection of letters, writing movement of connections and relative alignment of letters were found between the questioned signature on the questioned prescription in item Q1 and the control signature specimens written by Doctor Rachel Dougherty in items K1a-c. In view of the above findings, I am of the opinion that the questioned signature on the questioned prescription in item Q1 was written by Doctor Rachel Dougherty. 7. The questioned signature on the questioned prescription in item Q2 was examined and compared with the control signature and handwriting specimens written by Doctor Rachel Dougherty in items K1a-c and the doctor's son Richie Dougherty in items K2a-c respectively. 8. Differences in characteristic writing features such [sic] letter spacing, design and construction of letters, connection of letters, writing movement and relative proportion of strokes were found between the questioned signature on the questioned prescription in item Q2 and the control signature and handwriting specimens written by Doctor Rachel Dougherty in items K1a-c. In view of the above findings, I am of the opinion that the questioned signature on the questioned prescription in item Q2 was not written by Doctor Rachel Dougherty. 9. Differences in characteristic writing features such as design and construction of letters, use of diacritics, connection of letters and writing movement of strokes were found between the questioned signature on the questioned prescription in item Q2 and the control signature and handwriting specimens written by the doctor's son Richie Dougherty in items K2a-c. In view of the above findings, I am of the opinion that the questioned signature on the questioned prescription in item Q2 was not written by the doctor's son Richie Dougherty.
FF4GWZ	1. There is conclusive evidence that the author of the specimen material (K1(a-c)) wrote the questioned handwriting and signature on Q1. 2. There is conclusive evidence that the author of the specimen material (K2(a-c)) did not write the questioned handwriting and signature on Q1. 3. There is conclusive evidence that the writer of the specimen material (K2(a-c)) wrote the questioned signature on Q1. 4. There is conclusive evidence that the author of the specimen material (K1(a-c)) did not write the questioned signature on Q1. 5. There is strong support for the view that writer of the specimen material (K2(a-c)) did not write the questioned signature on Q1. 6. There strong support for the view that the author of the specimen material (K1(a-c)) did not write the questioned signature on Q1. [sic]
FJGAV6	Questioned Handwriting: The writer of the specimen handwriting on documents K1a-K1c, purportedly by Rachel Dougherty, wrote the questioned handwriting (excluding the signature) on document Q1. The writer of the specimen handwriting on documents K2a-K2c, purportedly by Richie Dougherty, wrote the questioned handwriting (excluding the signature) on document Q2. Questioned Signatures: The writer of the specimen signatures on documents K1a-K1c, purportedly by Rachel Dougherty, wrote the questioned

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WebCode	Conclusions
	signature on document Q1. It was not possible to determine whether or not the writers of the specimen signatures and handwriting, purportedly Rachel Dougherty (K1a-K1c) and Richie Dougherty (K2a-K2c), wrote the questioned signature on document Q2.
FKUY3N	1 - Rachael[sic] Dougherty wrote the questioned text and "R. Dougherty" signature reproduced on Exhibit 1. 2 - Rachael[sic] Dougherty and Richie Dougherty could neither be identified nor eliminated as the writer of the questioned "R. Dougherty" prescriber signature reproduced on Exhibit 2. 3 - Richie Dougherty wrote the remaining questioned text reproduced on Exhibit 2.
FL7H3L	It was determined that Rachel Dougherty, the writer of items K1a-c, prepared the writing and signature on item Q1. No conclusion could be reached as to whether or not Rachel Dougherty, K1a-c, prepared the signature on item Q2, due to the lack of comparable known writing and characteristics in the questioned writing which could not be accounted for on the basis of the available known writing. It was determined that Richie Dougherty, the writer of items K2a-c, prepared the writing, excluding the signature, on item Q2. No conclusion could be reached as to whether or not Richie Dougherty, K2a-c, prepared the signature on item Q2, due to the lack of comparable known writing and characteristics in the questioned writing which could not be accounted for on the basis of the available known writing.
FUHV34	Based on the evidence examined, Rachel Dougherty (Item 3.1, 3.2, + 3.3) + (K1a-c) has been identified as the writer of the questioned entries appearing on Item 1 (Q1) to include the "Prescriber Signature." Rachel Dougherty is eliminated as the writer of the questioned entries appearing on Item 2 (Q2). It is probable that Rachel Dougherty did not write the "Prescriber Signature" on Item 2 (Q2). Richie Dougherty (Item 4.1, 4.2, + 4.3) + (K2a-c) has been identified as the writer of the questioned entries appearing on Item 2 (Q2). There is no conclusion as to whether Richie Dougherty did or did not write the "Prescriber Signature" on Item 2 (Q2). Richie Dougherty has been eliminated as the writer of the questioned entries appearing on Item 1 (Q1). Richie Dougherty is also eliminated as the writer of the "Prescriber Signature" on Item 1 (Q1).
FVGXTU	1. The writer of item K1 wrote the handwriting and signature item Q1. This writer did not write the handwriting and signature item Q2. 2. The writer of item K2 wrote the handwriting on item Q2. I am unable determine whether or not this writer wrote the signature on item Q2. [sic]
G4L69U	In my opinion, the writer of the K1 specimen material also produced the h/w entries and signature on Q1. In my opinion, the writer of the K2 specimen material also produced the h/w entries on Q2. Differences were observed between the K1 + K2 specimen signatures and the signature on Q2. I cannot comment on the significance of these observations and hence my opinion is inconclusive.
G4M3G4	Upon completion of an examination and comparison of the exhibits and standards submitted in this case, this examiner has reached the following opinions: The K1 writer did write the questioned text and signature appearing on the Q-1 exhibit. The K2 writer did write the questioned text appearing on the Q-2 exhibit. There are indications that the Q-2 questioned signature is a possible simulation or disguise, and thus no determination of authorship could be made.
G8KM6Z	We are not able to identify or eliminate whether if[sic] Richie Dougherty (K2) wrote the questioned signature on questioned prescription (Q2). It is because there are some points that are similar to K2's writing, however, some of the points that are not similar to K2's writing.[sic] Points that are similar to K2's writing: 1. The overall structure of the questioned signature on Q2 is similar to K2's writing. 2. The average size of the questioned signature on Q2 is similar to K2's writing. 3. When the letters 'e, r, y,' in the questioned signature on Q2 are compared with K2's writing, they look alike. Points that are not similar to K2's writing: 1. When the letters in the questioned signature on Q2 are compared to K2's writing, they look different. It could be the imitation that causes the change in appearance of writing. 2. The writing directions of letters 'o, g' between the questioned signature on Q2 and K2's writing are different.
GELXGK	I compared the questioned handwriting and signatures on the Q1 and Q2 prescriptions to the known handwriting of Rachel Dougherty (K1a-c) and the known handwriting of Richie Dougherty (K2a-c). I conclude the following: 1. The handwritten material and the signature on the Q1 prescription was all written by Rachel Dougherty, when compared to K1a-c. 2. The handwritten material on the Q2 prescription was written by Richie Dougherty, when compared to K2a-c. 3. The signature on the Q2 prescription was probably not written by either Rachel Dougherty (K1a-c) or Richie Dougherty (K2a-c).

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	While there are some handwriting features in common between the questioned and known material, numerous differences were also noted. The questioned "R. Dougherty" signature on Q2 is partially manuscript style (disconnected letters) and partially cursive style (connected letters). The "R. Dougherty" and "Richie Dougherty" signatures in K2a-c are all cursive in style. If additional known signatures of Rachel Dougherty are provided (preferably on prescription slips) and additional known handwriting and signatures of Richie Dougherty are submitted for comparison, a more conclusive finding may be possible.
GGC4T6	Handwriting: 1) The writer of the specimen handwriting on Items K1 (a-c), purportedly Rachel Dougherty, wrote the questioned writing (excluding signature) on Item Q1. 2) The writer of the specimen handwriting on Items K2(a-c), purportedly Richie Dougherty, wrote the questioned writing (excluding signature) on Item Q2. Signatures: 1) The writer of the specimen signatures on Items K1 (a-c), purportedly Rachel Dougherty, wrote the questioned "R Dougherty" signature on Item Q1. 2a) No conclusion has been reached whether or not the writer of the specimen signatures on Items K1 (a-c), purportedly Rachel Dougherty, may have written the questioned signature (excluding writing) on Item Q2. 2b) There is some evidence to indicate that the writer of the specimen signatures on Items K2(a-c), purportedly Richie Dougherty, did not write the questioned signature (excluding writing) on Item Q2; however, this evidence falls considerably short of that required for an elimination of this writer.
GGPTY3	If the photographic evidence submitted is a true and accurate representation of the original evidence there is a strong probability that Rachel Dougherty wrote and filled in the prescription information on the questioned document, Q1. There is a strong probability that Rachel Dougherty wrote the signature on the questioned document, Q1. There is a strong probability that Rachel Dougherty did not write or fill in the prescription information on the questioned document, Q2. There is no basis for an identification or elimination of Rachel Dougherty as the writer of the signature on the questioned document, Q2. If the photographic evidence submitted is a true and accurate representation of the original evidence there is a strong probability that Richie Dougherty did not write or fill in the prescription information on the questioned document, Q1. There is a strong probability that Richie Dougherty did not write the signature on the questioned document, Q1. There is a strong probability that Richie Dougherty wrote and filled in the prescription information on the questioned document, Q2. There is no basis for an identification or elimination of Richie Dougherty as the writer of the signature on the questioned document, Q2.
GHNVQR	1. The writer of the specimen handwriting and signatures on Exhibit K1 (a-c) wrote the questioned handwriting and signature on Exhibit Q1. 2. The writer of the specimen handwriting on Exhibit K2 (a-c) wrote the questioned handwriting and signature on Exhibit Q2 (excluding signature).[sic] 3. No conclusion could be reached as to whether or not the writers of the specimen handprinting and signatures on Exhibits K1 (a-c) and K2 (a-c) wrote the questioned signature on Exhibit Q2.
GJV6RX	It was determined that the questioned writing (excluding the signature) on Item Q1 was written by Rachel Dougherty, the writer of K1a-c. It was determined that the questioned signature on Item Q1 was written by Rachel Dougherty, the writer of K1a-c. It was determined that the questioned writing (excluding the signature) on Item Q2 was written by Richie Dougherty, the writer of K2a-c. No conclusion could be reached whether Rachel Dougherty, K1a-c, or Richie Dougherty, K2a-c, prepared the signature on Item Q2 due to the lack of sufficiently comparable writing and the presence of unexplained characteristics. If desired more known writing from both Rachel Dougherty, Richie Dougherty, or any other logical suspect(s) may be submitted for examination and comparison.
GZQFQ2	It has been concluded that Rachel Dougherty (K1) wrote the questioned material appearing on the Exhibit Q1 item and did not write the questioned hand printed material appearing on the Exhibit Q2 item. It has been concluded that Richie Dougherty (K2) wrote the questioned hand printed material appearing on the Exhibit Q2 item and did not write the questioned material appearing on the Exhibit Q1 item. It has been determined that Rachel Dougherty (K1) probably did not write the questioned signature where it appears on the Exhibit Q2 item. It has been determined that Richie Dougherty (K2) probably did not write the questioned signature where it appears on the Exhibit Q2 item.
H76NKB	It was determined the questioned writing on item Q1 (including the signature) was written by Rachel Dougherty, known writer of item K1a through K1c. It was determined the questioned writing on item Q2 (excluding the signature) was written by Richie Dougherty, known writer of item K2a through K2c. A definitive determination could not be reached whether or not the questioned signature on item Q2 was prepared by either Rachel or Richie Dougherty, known writers of items K1a through K1c and K2a through

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	<p>K2c, respectively, due to characteristics in the questioned signature that were not observed in the known writing. However, inconsistencies were observed to indicate Richie Dougherty may not have written the questioned signature on item Q2. A more definitive determination may be reached regarding the questioned signature on item Q2 if additional dictated and undictated known writing is obtained from Rachel and Richie Dougherty, as well as any other logical suspects. The known writing should be comparable to the questioned signature in style, wording and format. Dictated known writing should be obtained on blank prescription pads similar to the questioned items, and should be removed from the writer's view upon completion. Numerous repetitions may be necessary in order to obtain naturally prepared writing. Undictated known writing consists of handwriting prepared during normal course of business activity. Possible sources of undictated known writing include business papers, letters, canceled checks, and/or applications.</p>
HJVHVJ	<p>Results of Examinations: The Q1 questioned writing and signature were prepared by Rachel Dougherty, the writer of K1(a-c). The Q2 questioned writing was prepared by Richie Dougherty, K2(a-c). Due to the presence of characteristics in the Q2 signature not accounted for in the available known writing, it could not be determined whether the Q2 signature was prepared by Rachel Dougherty, the writer of K1(a-c), or Richie Dougherty, the writer of K2(a-c).</p>
HK7JJ4	<p>There are many similarities and no significant differences between the handwriting (h/w) on Q1 and the known h/w of Rachel Dougherty. The nature of the similarities is such that she is responsible for the h/w on Q1. There are a number of similarities and few differences between the h/w on Q2 and the known h/w of Richie Dougherty. The nature of the similarities is such that it is highly probable that he is responsible for the h/w on Q2. By 'highly probable', we consider it very unlikely that another individual is responsible. There are few similarities and many differences between the h/w on Q2 and the known h/w of Rachel Dougherty. The nature of the differences is such that she is not responsible for the h/w [sic] Q2. There are many similarities and no significant differences between the signature on Q1 and the known signatures of Rachel Dougherty. The nature of the similarities is such that she is responsible for the signature on Q1.</p>
HN43JG	<p>On examination, I noted significant similarities in stroke quality and the formation of alphabet letters and numerals between the specimen handwriting of Rachel Dougherty in 'K1a-c' and the questioned handwriting in 'Q1'. (Please see the left column of the Comparison Chart 1 attached). In my opinion, it is highly probable that Rachel Dougherty, the writer of the specimen handwriting in 'K1a-c' wrote the questioned handwriting in 'Q1'. I noted significant similarities in stroke fluency and the formation and relative positioning of alphabet letters between the specimen signatures of Rachel Dougherty in 'K1a-c' and the questioned signature 'Q1'. (Please see the right column of the same Comparison Chart 1 attached). In my opinion, it is highly probable that Rachel Dougherty, the writer of the specimen signatures in 'K1a-c' wrote the questioned signature on 'Q1'. I noted significant similarities in stroke quality and the formation of alphabet letters and numerals between the specimen handwriting of Richie Dougherty in 'K2a-c' and the questioned handwriting in 'Q2'. (Please see the left column of the Comparison Chart 2 attached). In my opinion, it is highly probable that Richie Dougherty, the writer of the specimen handwriting in 'K2a-c' wrote the questioned handwriting in 'Q2'. I noted significant differences in stroke fluency, spacing, the formation and relative positioning of alphabet letters between the specimen signatures of Richie Dougherty in 'K2a-c' and the questioned signature in 'Q2'. (Please see the right column of the same Comparison Chart 2 attached). In my opinion, it is highly unlikely that Richie Dougherty, the writer of the specimen signatures in 'K2a-c' wrote the questioned signature in 'Q2'. I noted differences in stroke fluency and the size between the specimen signatures of Rachel Dougherty in 'K1a-c' and the questioned signature in 'Q2'. I also noted difference in the formation and spacing of some of the letters between them, though similarities were noted in certain features in the formation and slant of some of the alphabet letters between them. (Please see the Comparison Chart 3 attached). In view of the observation, I am [sic] opinion it is unlikely that Rachel Dougherty, the writer of the specimen signatures in 'K1a-c' wrote the questioned signature in 'Q2'. [The referenced "Comparison Charts 1 - 3" were not submitted.]</p>
HUC3G2	<p>The questioned writing (excluding signature) of the Q1 was written by Rachel Dougherty. The questioned writing (excluding signature) of the Q2 was written by Richie Dougherty. The signature on the Q1 was written by Rachel Dougherty. The signature on the Q2 was not written by Rachel Dougherty. The signature on the Q2 was not written by Richie Dougherty.</p>

TABLE 2

WebCode	Conclusions
J2NXGT	The handprinted text and signature on Q1 were written by the K1 writer. The handprinted text on Q2 was written by the K2 writer. No determination could be made whether or not the K1 or K2 writers wrote the signature on Q2. The limiting factors are the lack of sufficient comparable exemplar[sic], and the possibility that the questioned signature may be simulated or disguised.
J3M28H	The K1 writer has been identified as the writer of Q1. An opinion of "identification" is a conclusion with the highest degree of certainty and means that the features present in the comparable portions of the questioned and known documents provide evidence supporting common authorship. The K2 writer has been eliminated as the writer of Q1. An opinion of "elimination" is a conclusion of non-authorship with the highest degree of certainty and means that the features present in the comparable portions of the questioned and known documents provide evidence to support non-authorship. The K2 writer has been identified as the writer of the numerals and hand printed entries on Q2. An opinion of "identification" is a conclusion with the highest degree of certainty and means that the features present in the comparable portions of the questioned and known documents provide evidence supporting common authorship. The K1 writer has been eliminated as the writer of the numerals and hand printed entries on Q2. An opinion of "elimination" is a conclusion of non-authorship with the highest degree of certainty and means that the features present in the comparable portions of the questioned and known documents provide evidence to support non-authorship. Neither the K1 writer nor the K2 writer has been identified nor eliminated as the writer of the signature on Q2. This is an inconclusive result because the writing styles present in the signature portion of Q2 and the known documents do not allow for a meaningful analysis and comparison. No conclusion as to authorship can be provided.
J4ZHJB	Results of Examinations: It was determined that the questioned writing and the questioned signature appearing on Item Q1 was prepared by Rachel Dougherty, writer of Item K1a-c. It was determined that the questioned writing (excluding the signature) appearing on Item Q2 was prepared by Richie Dougherty, writer of Item K2a-c. It could not be determined if the questioned signature appearing on Item Q2 was or was not prepared by Rachel Dougherty, writer of Item K1a-c, or Richie Dougherty, writer of Item K2a-c, because characteristics were observed within portions of the questioned signature which suggest that the writing may have been an attempt to simulate and/or trace an authentic signature(s). Simulated and traced signatures do not contain the natural handwriting characteristics of the person that prepared them; therefore, it is unlikely that the questioned signature will be associated with any known writer through handwriting comparisons.
JDZAPF	It was determined that Rachel Dougherty, the writer of K1 a-c, prepared the questioned writing and signature on item Q1. It was determined that Richie Dougherty, the writer of item K2a-c, prepared the questioned writing on item Q2. Due to characteristics in the questioned signature that are not present in the available known writing, and the lack of sufficient comparable hand printed "R Dougherty" signatures, it could not be determined whether Rachel Dougherty, item K1 a-c, or Richie Dougherty, item K2a-c, prepared the questioned signature on item Q2.
JFA3XW	[No Conclusions Reported.]
K8FAA4	1. Examination, comparison, and evaluation of the questioned documents and the known writing samples resulted in the following opinions: a) The body portion of Q1 (excludes signature) was written by the author of K1 a-c (Rachel Dougherty). b) The body portion of Q1 (excludes signature) was not written by the author of K2 a-c (Richie Dougherty). c) The signature portion of Q1 (excludes body) was written by the author of K1 a-c (Rachel Dougherty). d) The signature portion of Q1 (excludes body) was not written by the author of K2 a-c (Richie Dougherty). e) The body portion of Q2 (excludes signature) was written by the author of K2 a-c (Richie Dougherty). f) The body portion of Q2 (excludes signature) was not written by the author of K1 a-c (Rachel Dougherty). g) No opinion regarding the signature portion of Q2 could be reached. The range of variation exhibited in the questioned signature and the known signatures contains insufficient significant similarities and insufficient significant dissimilarities. The Q2 signature is not completely comparable to the known signatures (i.e. Q2 is mostly print form; the known signatures are cursive). Additionally, a limited quantity of course of business known writing samples exists. If further attention is required regarding the Q2 signature, please submit comparable, contemporaneous, course of business, known writing samples.
KNY3X8	Comparison of the submitted items revealed that item #1 (Q1) was written by the writer of the samples in item #3 (K1). Excluding the Prescriber's Signature, item #2 (Q2) was written by the writer of the samples

TABLE 2

WebCode	Conclusions
	<p>in item #4 (K2). There are indications that the writer of the samples in item #3 (K1) wrote the Prescriber's Signature on item #2 (Q2) and that the writer of the samples in item #4 (K2) did not write the Prescriber's Signature on item #2 (Q2); however, no conclusive opinion can be offered. Samples from both writers filling in the Prescriber's Signature in both print and cursive may be of value for further comparison. If additional comparisons are requested, please, resubmit all items in their original packaging.</p>
KQ6QBC	<p>The questioned and the sample writings are reproductions. It is not possible to detect traces of manipulations and forgeries with the procedures of forensic document examination. Features/details of line quality and writing movement are only partially in view. This is not a sufficient basis to make definite conclusions concerning the genuineness and/or authorship of handwritings. In this laboratory examinations of reproductions normally lead to an inconclusive result like "C" (cannot be identified or eliminated). In some cases there is a supplement possible. This can be a statement like a tendency (e.g. "a common authorship of the questioned handwriting and the known specimen comes into consideration" or "there are no hints for a common authorship..."). Assuming that we deal with originals in this examination the wording in our report would be: A common authorship between Q1 (excluding the signature) and the samples K1 is probably. A common authorship between Q2 (excluding the signature) and the samples K2 is probably. A common authorship between the signature Q1 and samples K1 is probably. A common authorship between the signature Q2 and the samples K1 cannot be identified or eliminated. A common authorship between the signature Q2 and the samples K2 cannot be identified or eliminated. All identifications imply that an authorship of the other writer is excluded with (at least) the same degree. The reducing of the probabilities in the conclusions are caused by limitations of the graphic complexity in the questioned writings, shortcomings in the sample writings (see also the additional comments) and the limited familiarity with the American kind of handwriting. [sic]</p>
KUPD96	<p>It was concluded the author of Item K1a-c, Rachel Dougherty, prepared Item Q1 including the prescriber signature. It was also concluded the author of Item K2a-c, Richie Dougherty, prepared Item Q2 excluding the prescriber signature. No conclusion could be reached whether or not the authors of Items K1a-c and Item K2a-c prepared the prescriber's signature on Item Q2 as similarities or differences observed were not sufficient to either identify or eliminate them as the author.</p>
KYE62K	<p>Rachel Dougherty, K1a-c, prepared item Q1. Subject Dougherty did not prepare the questioned writing above the signature on Q2. Richie Dougherty, K2a-c, prepared the questioned writing above the signature on Q2. Subject Dougherty did not prepare the writing above the signature on Q1. A definite conclusion as to whether or not Rachel Dougherty, K1a-c, signed her name on item Q2 could not be reached. However, similarities were noted between the questioned signature and the known writing samples of Rachel Dougherty but these similarities are not sufficient to support a positive identification. It might be of value to submit additional printed signature samples of Rachel Dougherty for further comparison. A definite conclusion as to whether or not Richie Dougherty, K2a-c, prepared the questioned Rachel Dougherty signature on Q2 could not be reached. However, there are some dissimilarities between the questioned signature and the known writing samples of Richie Dougherty but these dissimilarities are not sufficient to support an elimination.</p>
KYF3AU	<p>Conclusion: 3.1 - Rachel Dougherty (K1) wrote all of the questioned writing, including her signature, as depicted on item Q1. 3.1.1 - Richie Dougherty (K2) did not write any entries, as depicted on item Q1. 3.2 - Richie Dougherty (K2) wrote the questioned writing (excluding the signature) as depicted on item Q2. 3.2.1 - Rachel Dougherty (K1) did not write the questioned writing (excluding the signature) as depicted on item Q2. 3.3 - Due to the lack of sufficient known "non-request" signatures, Rachel Dougherty (K1) can neither be identified nor eliminated as signing her name as depicted on item Q2. 3.4 - Due to the lack of known hand printing in the name "R Dougherty", Richie Dougherty (K2) can neither be identified nor eliminated as signing the "R Dougherty" signature entry as depicted on item Q2. Remarks: 3.5.1 - Known hand printing from Rachel Dougherty (K1) writing "R Dougherty" and non-request course of business prescriptions written by Rachel Dougherty (K1) will be needed for comparison to the Q2 entry. The additional writing should consist of Rachel Dougherty (K1) hand printing her name on at least 30 separate blank prescription-sized pieces of paper approximating the size and signature line spacing of the Q2 exhibit. The course of business prescriptions should consist of at least 30 prior prescriptions written within the last 6 months to the Q2 presc. 3.5.2 - Know[sic] hand printing from Richie Dougherty (K2) writing "R Dougherty" will be necessary for comparison to the Q2 signature entry. The requested handwriting should consist of at least 30 repetitions of "R Dougherty" written on the signature</p>

TABLE 2

WebCode	Conclusions
	line of at least 30 separate blank prescription-sized pieces of paper approximating the size and signature line spacing of the Q2 exhibit.
L7RNRW	1. K1 (Rachel Dougherty) wrote the questioned writings, including the "prescriber signature" on the Q1 prescription. 2. K2 (Richie Dougherty) wrote the questioned writings above the "prescriber signature" on the Q2 prescription. 3. K1 and K2 can neither be identified or eliminated as being the writer of the Q2 "prescriber signature". 4. The questioned Q2 signature could be an attempt to simulate the handwriting habits of the K1 writer or an attempt by the K1 writer to disguise her signature.
LC622W	Rachel Dougherty: Rachel Dougherty produced the questioned writing depicted on Item 1 (Q1). There is no conclusion if Rachel Dougherty did or did not produce the questioned RDougherty signature depicted on Item 2 (Q2). Richie Dougherty: Richie Dougherty produced the questioned writing depicted on Item 2 (Q2) excluding the RDougherty signature. There is no conclusion if Richie Dougherty did or did not produce the questioned RDougherty signature depicted on Item 2.
LW7CKQ	It was concluded that the questioned writing on the Q1 document was prepared by the K1 writer, Rachel Dougherty. It was further concluded that the questioned writing on the Q2 document (excluding the questioned "R Dougherty" signature) was prepared by the K2 writer, Richie Dougherty. Due to unexplained letter formations not resolved in the questioned "R Dougherty" signature on Q2 when compared to the K1 writer, Rachel Dougherty and the K2 writer, Richie Dougherty, a definite conclusion could not be reached if either writer did or did not prepare it.
LW7FCF	The Q1 prescription form was probably produced by the writer of the K1 exemplars. Although this is not a positive identification, there are sufficient similarities to establish a strong likelihood that the writer of the K1 exemplars wrote the questioned writing. The Q2 prescription form, excluding the prescriber signature, was probably produced by the writer of the K2 exemplars. Although this is not a positive identification, there are sufficient similarities to establish a strong likelihood that the writer of the K1 exemplars wrote the questioned printing. No determination could be made as to whether or not the excluded signature was produced by either of the exemplar writers. This signature was prepared with both printing and cursive writing. The exemplar signatures provided from both writers were prepared with all cursive writing. Although the exemplars provided from both writers did contain some hand printing it was not in the question signature area and therefore was a limiting factor in this comparison. It should be noted that some agreement and disagreement was noted between this questioned signature and the exemplars from both exemplar writers. In view of the above and the possibility that someone may have simulated this signature, no determination can be made as to who prepared it.
MB36FR	I have examined 3 submitted specimens of known signatures and handwriting used for comparison with 2 documents each containing a questioned signature and questioned handwriting. For the purpose of this examination I have labeled these submitted specimens[sic] of known signatures and handwriting as exhibits K1a, K1b and K1c. Today I have compared the signatures and handwriting on the K1a, K1b and K1c documents to the signatures and handwriting on the questioned documents, identified herein as Q1 and Q2 to determine if the author of the signatures and handwriting on the K1a, K1b and K1c documents was the same person whose signature and handwriting is on the questioned documents, Q1 and Q2, prescriptions from a prescription pad. The handwriting characteristics that were evaluated include baseline usage, commencement strokes, terminal strokes, margins, spacing between words, spacing between letters, letter size proportions, numerals, punctuation marks, pressure patterns, idiosyncrasies in writing, slant, skill level, connecting strokes, letter form combinations and letter designs. Based upon the documents submitted, it is the opinion of this examiner that the signature and handwriting on the questioned document, Q1, was written by the same person whose signature and handwriting is on the documents K1a, K1b and K1c. I have also determined that the handwriting on the second questioned document identified as Q2 was not written by the same person whose handwriting is on the documents K1a, K1b and K1c. Regarding the questioned signature on Q2, I have determined that there are some handwriting characteristics in the questioned signature that are similar to handwriting characteristics in K1a, K1b and K1c that may possibly suggest the same writer, but this is far from conclusive. I have examined 3 submitted specimens of known signatures and handwriting used for comparison with 2 documents each containing a questioned signature and questioned handwriting. For the purpose of this examination I have labeled these submitted exemplars as exhibits K2a, K2b and K2c. Today I have compared the signatures and handwriting on the K2a, K2b and K2c documents to the signatures and

TABLE 2

WebCode	Conclusions
	handwriting on the questioned documents, identified herein as Q1 and Q2 to determine if the author of the signatures and handwriting on the K2a, K2b and K2c documents was the same person whose signature and handwriting is on the questioned documents, Q1 and Q2, prescriptions from a prescription pad. The handwriting characteristics that were evaluated include baseline usage, commencement strokes, terminal strokes, margins, spacing between words, spacing between letters, letter size proportions, numerals, punctuation marks, pressure patterns, idiosyncrasies in writing, slant, skill level, connecting strokes, letter form combinations and letter designs. Based upon the documents submitted, it is the opinion of this examiner that the signature and handwriting on the document Q1 was not written by the same person whose signature and handwriting is on the documents K2a, K2b and K2c. I have also determined that the handwriting on the second questioned document identified as Q2 was written by the same person whose signature and handwriting is on the documents K2a, K2b and K2c. Regarding the questioned signature on Q2, I have determined that there are some handwriting characteristics in the questioned signature that are similar to handwriting characteristics in K2a, K2b and K2c that may possibly suggest the same writer, but this is far from conclusive.
MCR99Y	Based on an examination of the submitted documents, the following conclusions were reached: Rachel Dougherty (K-1) very probably wrote the questioned hand printing and signature on Exhibit Q-1. Richie Dougherty (K-2) very probably wrote the questioned hand printing on Exhibit Q-2, excluding the signature. No conclusion could be reached as to whether Rachel Dougherty (K-1) or Richie Dougherty (K-2) wrote the questioned signature on Exhibit Q-2.
MD9LVB	[No Conclusions Reported.]
MK8TTX	1. Q1 was written & signed by Rachel Dougherty. 2. Q2 was written by Richie Dougherty and was probably not signed by Rachel Dougherty. 3. Q2 was not signed by Richie Dougherty.
MLM4XH	1. Rachel Dougherty wrote the Q1 prescription, including the signature. 2. Richie Dougherty wrote the Q2 prescription, excluding the signature. 3. Neither Rachel Dougherty nor Richie Dougherty could be identified or eliminated as the writer of the signature on the Q2 prescription.
MYPQNG	In Q1 document, general characters of handwriting and all letters shape (specially number 6, 3; letters in upper case like C, V, J, Q, T, letters in lower case like k, g, f, a, o etc) show lot of similarities with Rachel Dougherty's writings (on dictation K1a, K1b and spontaneous writing K1c). All characteristics find their equivalent in Rachel Dougherty's writing. Concerning signature, the comparison with Rachel Dougherty signature shows also numerous and important similarities. In Q2, concerning handwriting, general characters and all letters shape show many similarities with Richie Dougherty's handwriting in spite of the bad quality of items K2a and K2b. Alteration of stroke, probably made by stress, is clearly visible on many letters. Concerning signature, similarities with Richie's signature or handwriting are a little more difficult to be found (the most important are about ratio w/l) and some similarities (specially in letters shape) could be found with Rachel too. [sic]
MZKEYA	The writer of Exhibit K1 (Rachel Dougherty) wrote the questioned hand printed entries and signature on Exhibit Q1. The writer of Exhibit K2 (Richie Dougherty) wrote the questioned hand printed entries in the body of Exhibit Q2. Due to a lack of comparably executed known writing, the writer of Exhibit K2 (Richie Dougherty) could neither be identified, nor eliminated as having written the questioned "R. Dougherty" signature on Exhibit Q2. The questioned "R. Dougherty" signature on Exhibit Q2 was probably not written by the writer of Exhibit K1 (Rachel Dougherty), but due [sic] an insufficient amount of known normal-course-of-business signatures, a conclusive opinion could not be rendered.
MZNUFG	Rachel Dougherty wrote the questioned entries on Q1. Richie Dougherty wrote the questioned entries on Q2, excluding the signature. Rachel Dougherty probably wrote the questioned signature on Q2. Richie Dougherty probably did not write the questioned signature on Q2.
NAM38X	1- The questioned writing including the signature in item Q1 was written by Rachel Dougherty. 2- The questioned writing excluding the signature in item Q2 was written by Richie Dougherty. 3- The questioned signature in item Q2 was not written by Rachel Dougherty. 4- Cannot be Identified or Eliminated if the questioned signature in item Q2 was written by Richie Dougherty.
NGLJ3X	The questioned writing depicted on Q-1 was written by Rachel Dougherty. The questioned signature depicted on Q-1 was signed by Rachel Dougherty. The questioned writing depicted on Q-2 was written

TABLE 2

WebCode	Conclusions
	by Richie Dougherty[sic]. No conclusion can be rendered as to whether or not the questioned signature depicted on Q-2 was signed by Rachel and/or Richie Dougherty[sic].
P8CHYN	A physical analysis was conducted on the submitted questioned writings, consisting of a visual and microscopic examination. The following opinions are based on, among other things, writing quality consistency, and writing features, e.g. slant, formation, size relationship, and internal variation. It has been concluded that the writer of the submitted known writings and signatures for Rachel Dougherty (exhibits K1a-c) wrote the writing and signature found on exhibit Q1. It has been concluded that the writer of the known writings submitted for Richie Dougherty (exhibits K2a-c) wrote the writings (excluding the signature) found on exhibit Q2. As far as the questioned signature found on exhibit Q2, no conclusion was reached regarding authorship.
PC7ELU	It certainly uniprocudente the writings of Q1 with the pattern material K1a-c, because of the identity grafonomoca found. It esdcritos uniprocudente doubt the Q2 to K2 BC by material pattern present aspects grafonomicos consistent. The signatures observed in the two question papers Q1 and Q2 were prepared by who provided the samples K1 ac. [sic]
PG7EBQ	In our opinion we think that the questioned writing and the questioned signature of Q1 were written by K1. In our opinion we think that the questioned writing and the questioned signature of Q2 were not written by K1. In our opinion we think that the questioned writing (excluding the signature) of Q2 was written by K2. In our opinion we think that the questioned signature of Q2 was probably written by K2.
PQQQHX	1. The K1 writer wrote Item Q1. 2. Excluding the signature, the K2 writer wrote Item Q2. 3. No conclusion was reached as to whether the K1 writer or the K2 writer or someone else wrote the signature on Item Q2. 4. The Item Q2 signature bear[sic] both similarities and dissimilarities to the known signatures of the K1 writer. I was unable to determine whether the dissimilarities were the result of simulation (freehand imitation) or intentional disguise.
PWFC6Q	1. It has been concluded that both the questioned text and signature on Q1 were written by same individual who produced all the handwriting on K1 (Rachel Dougherty). 2. There is very strong support for the proposition that the questioned handwriting appearing on the prescription Q2 was written by the writer of the comparison Richie Dougherty (K2) samples. 3. The signature on Q2 was probably written by Richie Dougherty, and K1 writer was probably not wrote.[sic]
Q4TJKU	1) The questioned writings on Q1 were written by the writer of documents K-1 (a to c) (Rachel Dougherty). 2) The questioned writings on Q2 were written by the writer of documents K2 (a to c) (Richie Dougherty). 3) The signature "R Dougherty" on Q-1 was written by the writer of the "R Dougherty" signatures on K-1 (a to c) (Rachel Dougherty). 4) The writer of the "R Dougherty" signatures on K-1 (a to c) (Rachel Dougherty) cannot be identified or eliminated as the writer of the R Dougherty signature on Q-2. 5) The writer of the "R Dougherty" signatures on K-2 (a to c) (Richie Dougherty) is not the writer of the "R Dougherty" signature on Q-2.
QFNUX8	The writer of Exhibit K1a-c (Rachel Dougherty) wrote the questioned entries and signature on Exhibit Q1. The writer of Exhibit K1a-c (Rachel Dougherty) did not write the questioned entries on Exhibit Q2. The writer of Exhibit K1a-c (Rachel Dougherty) probably did not write the questioned signature on Exhibit Q2; however, due to an insufficient amount of normal-course-of-business signatures, a conclusive opinion could not be rendered. The writer of Exhibit K2a-c (Richie Dougherty) did not write the questioned entries and signature on Exhibit Q1. The writer of Exhibit K2a-c (Richie Dougherty) wrote the questioned entries on Exhibit Q2. Due to an insufficient amount of comparable known writing, the writer of Exhibit K2a-c (Richie Dougherty) could neither be identified, nor eliminated as the writer of the questioned signature on Exhibit Q2.
QKKGNA	It was determined that Rachel Dougherty, writer of Item K1a-c, prepared the questioned writing on Item Q1 (including the Prescriber Signature entry). It was determined that Richie Dougherty, writer of Item K2a-c, prepared the questioned writing on Item Q2 (excluding the Prescriber Signature entry). A definite determination could not be reached whether Rachel Dougherty, writer of Item K1a-c, or Richie Dougherty, writer of Item K2a-c, prepared the questioned "Prescriber Signature" entry on Item Q2 due to characteristics in the questioned signature which were not accounted for in the submitted known writing. However, inconsistencies were observed which indicate Richie Dougherty, K2a-c, may not have prepared the "Prescriber Signature" entry on Item Q2.

TABLE 2

WebCode	Conclusions
QKX2GK	In my opinion, the h/w on Q1 was produced by the writer of K1. In my opinion, the h/w on Q2 was produced by the writer of K2. In my opinion, the signature on Q1 is a genuine K1 signature and was produced by the writer of the K1 sigs. My opinion regarding authorship of the signature on Q2 is inconclusive.
QKYXPU	Upon completion of a comparison and examination of the exhibits submitted the following opinions were reached: The K1 writer, Rachel Dougherty did write the Q1 prescription text and signature. The K2 writer Richie Dougherty did write the text of the Q2 prescription excluding the signature. Based on the K1 and K2 standards provided there are variations unaccounted for in the Q2 signature. Therefore, the K1 and K2 writers could not be identified or eliminated regarding the Q2 signature.
QNG8NU	It certainly uniprocendente the writings of Q1 with the pattern material K1a-c, because of the identity grafonomoca found. It esdcritos uniprocendente doubt the Q2 to K2 BC by material pattern present aspects grafonomicos consistent. The signatures observed in the two question papers Q1 and Q2 were prepared by who provided the samples K1 ac. [sic]
QTT7BL	1. I have found strong similarities in the handwriting characteristics between the handwriting and the signature on Q1 and the handwriting samples in the name of Rachel Dougherty, K1a-c, and in my opinion Rachel Dougherty wrote the questioned writing and signature on Q1. 2. I have found strong similarities in the handwriting characteristics between the handwriting on Q2 (excluding the signature) and the handwriting samples in the name of Richie Dougherty, K2a-c and in my opinion the handwriting on Q2 was written by him. 3. I have found strong similarities in the handwriting characteristics between the signature on Q2 and the handwriting samples in the name of Richie Dougherty, K2a-c, to a degree that leaves no real doubt that the signature on Q2 was written by Richie Dougherty. 4. I have found dissimilarities between the signature on Q2 and the handwriting samples in the name of Rachel Dougherty and it is highly probable that the signature was not written by Rachel Dougherty.
R24MK7	Contributor number one, Rachel Dougherty, is identified as the author of the questioned writings appearing on Q1. Contributor number two, Richie Dougherty, is identified as the author of the questioned written entries appearing on the Name and Date lines, as well as the questioned writings, "Percocet 10 mg...6 tablets", appearing in the prescription information section on Q2. Contributor number two could neither be identified nor eliminated as the author of the questioned signature appearing on Q2 utilizing the specimen writings provided. It is recommended that additional comparable specimen writings be obtained from this contributor in the form of collected writings in cursive, written during the normal course of business and submitted for further examination. Evidence was found to indicate contributor number one probably did not author the questioned signature appearing on Q2.
R3B9PX	1. Rachel Dougherty[sic] (K1)[sic] is identified as writing and signing prescription Q1. 2. Richie Dougherty (K2) is identified as writing prescription Q2, with the possible exception of the "R Dougherty" Prescriber Signature. Findings are inconclusive as to whether or not he wrote this signature. 3. The "R Dougherty" Prescriber Signature on Q2 is not a genuine signature of Dr. Rachel Dougherty and was not written by her.
RBNAZ2	In my opinion there is conclusive evidence Rachel Dougherty wrote out and signed Q1. There is conclusive evidence Richie Dougherty did not write these entries. In my opinion there is conclusive evidence that Richie Dougherty wrote out item Q2. The signature on item Q2 is similar in some respects to the specimens of Rachel Dougherty but differs in others. Based on the specimens provided it is not a normal genuine signature written by her, but nor is it a close copy of her signature shown by these specimens. The degree of correspondence between this signature and her specimens is also greater than would be expected if it was written by some other person who had no knowledge of her signature. I have considered the possibility that Rachel Dougherty may have signed her name in a different style to that shown by the specimens, or someone may have copied a previous style of her signature (that is, she may have signed in a different style in the past and someone has attempted to simulate an older version of her signature). From the material available it is not possible to reliably assess which alternative is more likely. Consequently the evidence as to whether Rachel Dougherty, Richie Dougherty or some other person signed item Q2 is inconclusive.
RKABHW	Characteristics of handwriting (including signatures) in Q1, Q2 analyzed compared with K1, K2 using character table, and independently analyzed signatures of Q1, Q2. In Q1, the characteristics of

TABLE 2

WebCode	Conclusions
	handwriting and signature identical with K1 handwriting and signatures. Otherwise in Q2, the characteristics of handwriting are matched with K2, but the characteristics of signature are not matched with K2 signature, matched with K1 handwriting and signature. Especially, as some representative characteristics of Q2 signature and K1 handwriting and signature, the curving stroke in capital letter "R", counterclockwise rotating strokes of small letter "o, g", the tracing stroke of small letter "u", and the direction of ending stroke of small letter "y" are weighted matching characteristics. And we concluded the Q2 signature is written by K1 writer, not by K2 writer. [sic]
RYCXPR	The questioned writing on the prescription dated June 5, 2011, and the questioned signature on it (item Q1) were written by Rachel Dougherty (known writings K1a-c). The questioned writing on the prescription dated July 16, 2011 (item Q2) was written by Richie Dougherty (known writings K2a-c). The questioned signature on the prescription dated July 16, 2011 (item Q2) was probably written by Rachel Dougherty. It was found that this signature is not typical for her but there is a good correlation between features characterising it and her known writing especially when taken into account the samples collected for on K1c. [sic]
T3RHJK	The writer of items K1a - K1c, Rachel Dougherty, wrote the questioned text and the questioned signature on Q1. This same writer, Rachel Dougherty, did not write the questioned signature on Q2. The writer of items K2a - K2c, Richie Dougherty, wrote the questioned text on Q2. This same writer, Richie Dougherty, did not write the questioned signature on Q2.
T447TY	After comparison of the questioned documents (Q1, Q2) with the known writings of doctor Rachel Dougherty (K1a, K1b, K1c) and doctor's son Richie Dougherty (K2a, K2b, K2c), we found the following: 1. Doctor Rachel Dougherty (K1) has written the questioned prescription (Q1). 2. Doctor's son Richie Dougherty (K2) has written the questioned prescription (Q2). 3. Doctor Rachel Dougherty (K1) has signed in the prescription (Q1). 4. We can not give any opinion about the signature in the prescription (Q2).
T4KHDP	Result of Examination: As a result of examination and comparison based solely on the material submitted and within the limitations imposed by examination of photocopies in lieu of original documents, the following conclusions and observations are opinions based upon my experience, education and training and are as follows: 1. The questioned writing and signature present on exhibit Q1 were written by the author of K1A-C (Rachel Dougherty). 2. The questioned writing and signature present on exhibit Q1 were not written by the author of K2A-C (Richie Dougherty). 3. The questioned writing present on exhibit Q2 was not written by the author of K1A-C (Rachel Dougherty). 4. The questioned writing present on exhibit Q2 was written by the author of K2A-C (Richie Dougherty). 5. The questioned signature present on exhibit Q2 probably was written by the author of K1A-C (Rachel Dougherty). 6. The questioned signature present on exhibit Q2 probably was not written by the author of K2A-C (Richie Dougherty).
T4QLBA	The results of the examination strongly support that the questioned writing on Q1 including the signature is written by Rachel Dougherty (Level +3) and that it is not written by Richie Dougherty (Level -3). The results of the examination strongly support that the writing on Q2 excluding the signature is written by Richie Dougherty (Level +3) and that it is not written by Rachel Dougherty (Level -3). The results of the examination neither support that the signature on Q2 was written nor support that it was not written by Rachel Dougherty or Richie Dougherty (Level 0).
TMG27Q	1. It has been concluded that it is probable that the questioned handwriting on Exhibit Q1 was executed by the K1 specimen writer. 2. It has been concluded that it is probable that the questioned handwriting on Exhibit Q1 was not executed by the K2 specimen writer. 3. It has been concluded that it is probable that the questioned handwriting on Exhibit Q2 was not executed by the K1 specimen writer. 4. It has been concluded that it is probable that the questioned handwriting on Exhibit Q2 was executed by the K2 specimen writer. 5. It has been concluded that it is highly probable that the questioned signature "R Dougherty" on Exhibit Q1 was executed by the K1 specimen writer. 6. It has been concluded that it is highly probable that the questioned signature "R Dougherty" on Exhibit Q2 was not executed by the K1 specimen writer. 7. The questioned signature "R Dougherty" on Exhibit Q2 has not been identified or eliminated as having been executed by either of the K1 and K2 specimen writers.
TRTRU7	Rachel Dougherty wrote the questioned hand printing and prescriber signature on Q1. Richie Dougherty wrote the questioned hand printing on Q2. There are indications that Richie Dougherty did not write the prescriber signature on Q2; however, this opinion is far from conclusive. Although there are some

TABLE 2

WebCode	Conclusions
	pictorial similarities between the questioned prescriber signature on Q2 and the known writing sample of Rachel Dougherty, no conclusion could be reached whether or not Rachel Dougherty wrote the questioned signature on Q2.
UB7NVH	In my opinion, there is very strong support for the proposition that the handwriting and signature appearing on Q1 were written by the writer of the comparison K1 handwriting and signature samples. In my opinion, there is very strong support for the proposition that the handwriting appearing on Q2 was written by the writer of the comparison K2 handwriting samples. No opinion can be expressed as to whether or not the questioned signatures appearing on Q2 was written by either of the writers of the comparison K1 or K2 signature samples.
UEDGGZ	1. The characteristics of the questioned writing and signature in item Q1, matches the characteristics of the known writings and signatures present in items K1a, K1b and K1c; therefore item Q1 was written and signed by Rachel Dougherty. 2. The characteristics of the questioned writing present in item Q1[sic], matches the known writings present in items K2a, K2b and K2c, therefore item Q2 was written by Richard Dougherty. 3. Although there are some similar characteristics between the questioned signature present in item Q2 and the items K2a, K2b and K2c, it is not possible [sic] either confirm or exclude Mr Richard Dougherty as the person who signed the questioned item Q2.
ULXL7U	With regard to the writing on the document identified Q1 there are similarities in the formation of letters, stop, connection, start and end of stroke, slope, proportion and size which are observed in K1. However, it was observed that the writing in Q2 had limited similarities and great amount of dissimilarities. By comparing the writing of the document identified Q1 with K2 there are some similarities, but limited, and major dissimilarities, so it is advisable to obtain several known samples of Richie. But Richie (K2) wrote the document identified Q2, where you can see similarities with variations. There are similarities in the patterns in the formation of stroke and formation of letters, which indicate that Rachel signed the document identified Q1. However, there is a probability that the habits of writing present in the document identified Q2 were produced by Rachel, which has the ability to do so. With regards to the signatures in Q1 and Q2, the dissimilarities in the formation of stroke indicate that Richie is not the author.
UXRTAQ	1a) The questioned handwriting on Q1 was written by the writer of the specimen K1 handwriting. b) The questioned handwriting on Q2 was written by the writer of the specimen K2 handwriting. 2a) The questioned signature on Q1 was written by the writer of the specimen K1 signatures. b) It was not possible to determine if either of the K writers (i.e. K1, K2) wrote the questioned signature on Q2.
V6QHQQ	It was determined that the writer of Q1 questioned writing and signature was written by the writer of the K1 known writing. This finding is supported by the presence of significant individual characteristics between the writing. No conclusion could be made whether the K1 writer wrote the questioned signature on Q2 due to the fact that the Q2 signature contains mostly hand printing whereas all the K1 signatures are in cursive. A more conclusive determination may be made with the submission of additional known hand printed signature samples from the K1 writer. It was determined that the writer of Q2 questioned writing was written by the writer of the K2 known writing. This finding is supported by the presence of significant individual characteristics between the writing. No conclusion could be made whether the K2 writer wrote the questioned signature on Q2 due to the fact that the Q2 signature contains mostly hand printing whereas all the K2 signatures are in cursive. A more conclusive determination may be made with the submission of additional known hand printed signature samples from the K2 writer.
VJ9ELX	[No Conclusions Reported.]
VU7FZM	Rachel Daugherty (K-1) wrote the handprinted questioned entries and the questioned 'R Daugherty' signature depicted on exhibit Q-1. Ritchie Daugherty (K-2) wrote the handprinted questioned entries depicted on exhibit Q-2. It is highly probable Ritchie Daugherty did not write the 'R Dougherty' signature depicted on exhibit Q-2. [sic]
W3KEEY	1. The writing in question Q1, is identified with the known writings K1a, K1b and K1c of Mrs Rachel Dougherty, but it isn't identified with the known writings of Richie Dougherty. 2. The signature of prescription Q1 is not identical with the samples K2a, K2b and K2c written by Mr Richie Dougherty. 3. The manuscripts of the prescription Q2, is identified with known writings K2a, K2b and K2c of Mr. Richie Dougherty, but it isn't identified with the known writings K1a-c. 4. The signature of prescription Q2 can

TABLE 2

WebCode	Conclusions
	not be identified or eliminated as belonging to Mrs. Rachel Dougherty or to Mr. Richie Dougherty.
WAJ4V3	1. There is common authorship (same writer) between the writing and the R. Dougherty signature located on the Q1 document to the known submitted writing and R. Dougherty signatures located on K1A-K1C. (Known sample of Rachel Dougherty). 2. There is common authorship between the writing located on Q2 document (excluding the R. Dougherty signature) and the K2A-K2C known samples of Richie Dougherty. 3. The R. Dougherty signature located on Q2 cannot be identified or eliminated to either of the known samples submitted from Rachel Dougherty (K1A-K1C) or Richie Dougherty (K2A-K2C). The following opinion is qualified in that it is based on machine reproductions of questioned + known items.
WDEZAV	In my opinion: The questioned handwriting on Q1 was written by the writer of the comparison handwriting sample K1. The questioned handwriting on Q1 was not written by the writer of the comparison handwriting sample K2. There is qualified support for the proposition that the questioned handwriting on Q2 was not written by the writer of the comparison handwriting sample K1. There is qualified support for the proposition that the questioned handwriting on Q2 was written by the writer of the comparison handwriting sample K2. The questioned signature on Q1 was written by the writer of the comparison signature sample K1. The questioned signature on Q1 was not written by the writer of the comparison signature sample K2. No opinion can be expressed as to whether or not the questioned signature Q2 was written by the writer of the comparison signature sample K1. This is an inconclusive opinion. No opinion can be expressed as to whether or not the questioned signature Q2 was written by the writer of the comparison signature sample K2. This is an inconclusive opinion.
WPA8DR	For Q1 and Q2 handwritings and Q1 signature we could gain to "B" and "E" conclusions because of the quantity and the quality of the characteristics of the writings.[sic] In the fourth case we found similarities and differences side by side, and therefore cannot exclude the hand origin of K1 and K2 persons from the Q2 Signature.
WR2V3E	H/W: Q1/K1. There is qualified support for the proposition that the writer of the writings on K1 also wrote the writing on Q1. SIG: Q1/K1. There is very strong support for the proposition that Q1 is a Genuine Signature when compared [sic] the signatures that appear on K1. H/W: Q1/K2. There is very strong support for the proposition that the writer of K2 did not write Q1. SIG: Q1/K2. The signature on Q1 is not genuine when compared to the signatures which appear on K2. H/W: Q2/K1. There is very strong support for the proposition that the writer of the writings on K1 did not write the writing on Q2. SIG: Q2/K1. No opinion can be expressed as to whether or not the signature on Q2 is genuine or not genuine when compared to the signatures which appear on K1. H/W: Q2/K2. There is qualified support for the proposition that the writer of the writings on K2 also wrote the writing on Q2. SIG: Q2/K2. No opinion can be expressed as to whether signature on Q2 is genuine when compared to the signatures on K2.
WTUUBL	(i) The questioned handwriting on "Q1" showed similar handwriting characteristics as the specimen handwritings "K1a" to "K1c" but showed differences in handwriting characteristics from the specimen handwritings "K2a" to "K2c". Hence, I am of the opinion that the questioned handwriting was written by "Rachel Dougherty" but was not written by "Richie Dougherty". (ii) The questioned handwriting on "Q2" showed similar handwriting characteristics as the specimen handwritings "K2a" to "K2c" but showed differences in handwriting characteristics from the specimen handwritings "K1a" to "K1c". Hence, I am of the opinion that the questioned handwriting was written by "Richie Dougherty" but was not by "Rachel Dougherty". (iii) The questioned signature on "Q1" showed similar handwriting characteristics as the specimen signatures "K1a" to "K1c" but showed differences in handwriting characteristics from the specimen signatures "K2a" to "K2c". Hence, I am of the opinion that the questioned signature was written by "Rachel Dougherty" but was not written by "Richie Dougherty". (iv) The questioned signature on "Q2" showed differences in handwriting characteristics from the specimen signatures "K1a" to "K1c". Hence, I am of the opinion that the questioned signature was not written by "Rachel Dougherty". (v) I am not able to identify or eliminate whether or not the questioned signature on "Q2" was written by the the[sic] writer of the specimens[sic] signatures "K2a" to "K2c" ("Richie Dougherty").
WUNNPG	Richie is identified as the writer of Q2. Q2 was probably not signed by Richie. Rachel cannot be eliminated as the signatory of Q2. Rachel is identified as the signatory of Q1. Rachel is identified as the writer of the text in Q1.

TABLE 2

WebCode	Conclusions
WWBJAP	After examination and comparison of the material submitted, I could get the conclusions as following: 1. The writer of item K1a-c, Rachel Dougherty, wrote item Q1 (including the signature). This same writer, Rachel Dougherty, did not write item Q2 (including the signature). 2. The writer of item K2a-c, Richie Dougherty, wrote item Q2 (excluding the signature). This same writer, Richie Dougherty, did not write the signature on item Q2.
XADAQM	1. The writer of the known handwriting on K1 wrote the questioned handwriting on Q1. 2. The writer of the known handwriting on K2 wrote the questioned handwriting on Q2. 3. The writer of the known signature on K1 wrote the questioned signature on Q1. 4. It was not possible to determine whether or not the writers of the known signatures on K1 or K2 wrote the questioned signature on Q2. (See comments).
XQFXT	I have determined that the questioned writing and signature on specimen Q1 was written by the K1 writer. I have determined that the questioned writing excluding the signature on specimen Q2 was prepared by the K2 writer. I cannot determine whether or not Q2 signature was prepared by either the K1 or K2 writer.
XVDCKH	[No Conclusions Reported.]
YJXXYV	Rachel Dougherty, the Item K1a-c writer, prepared all the questioned entries on Item Q1. Richie Dougherty, the Item K2a-c writer, prepared the questioned entries (excluding the "R Dougherty" signature) on Item Q2. A definite determination could not be reached whether Rachel Dougherty or Richie Dougherty prepared the "R Dougherty" signature on Item Q2 due to the presence of characteristics not observed in the known writing. From the comparisons that could be conducted, Richie Dougherty may not have prepared this entry.
YLQJZY	Rachel Dougherty, K1, wrote all of the questioned entries on Item Q1. Richie Dougherty, K2, has been identified as the writer of all entries excluding the signature on Item Q2. Neither Rachel nor Richie could be associated or identified as the writer of the questioned signature on Item Q2.
YPJT3K	The questioned writing (excluding signature) of the Q1 was written by Rachel Dougherty. The questioned writing (excluding signature) of the Q2 was written by Richie Dougherty. The signature on the Q1 was written by Rachel Dougherty. The signature on the Q2 was not written by Rachel Dougherty. The signature on the Q2 was not written by Richie Dougherty.
YTH7L3	The writer of Exhibit K1 (Rachel Dougherty) wrote all questioned hand printed entries and "R Dougherty" signature on Exhibit Q1. The writer of Exhibit K2 (Richie Dougherty) wrote all questioned hand printed entries in the body of Exhibit Q2. The writer of Exhibit K2 (Richie Dougherty) could neither be identified, nor eliminated as the writer of the questioned "R. Dougherty" signature on Exhibit Q2. Additional known comparable writing of Richie Dougherty that duplicates the questioned signature should be submitted for comparison. The writer of Exhibit K1 (Richie[sic] Dougherty) probably did not write the questioned "R. Dougherty" signature on Exhibit Q2, but due to the insufficient amount of known signatures, a conclusive opinion could not be rendered.
YW4THW	1. Q1 has identity with the writings of K1. 2. Q2, excluding the signature, has identity with the writings of K2. 3. In K1 and K2 similar ideographic elements are not found which allow to stablish[sic] a graphic identity of the signature with Q2.
YYA89B	On the basis of the similarities observed and in the absence of any significant differences. I concluded that the questioned handwriting and signature on Q1 were written by the writer of the K1 specimens. On the basis of numerous fundamental differences observed, I concluded that the questioned handwriting and signature on Q1 were probably not written by the writer of the K2 specimens. Taking into account the conclusions given above in respect of this document and the writer of the K1 specimens, I concluded that the questioned handwriting and signature on Q1 were not written by the writer of the K2 specimens. On the basis of the similarities observed and in the absence of any significant differences, I concluded that the questioned handwriting on Q2 was written by the writer of the K2 specimens. I am inconclusive as to whether or not the writer of the K2 specimens also wrote the questioned signature on Q2. On the basis of numerous fundamental differences observed, I concluded that the questioned handwriting on Q2 was probably not written by the writer of the K1 specimens. Taking into account the conclusions given above in respect of this document and the writer of the K2 specimens, I concluded that the questioned

TABLE 2

WebCode	Conclusions
	handwriting on Q2 was not written by the writer of the K1 specimens. I am inconclusive as to whether or not the writer of the K1 specimens wrote the questioned signature on Q2. The two inconclusive results for the Q2 signature examinations arise because of observations of both similarities and differences with respect to both specimen writers and indeterminate features due to lack of access to the original for microscopic examination.
YYB4GL	Upon completion of an examination and comparison of the exhibits submitted in this case: This examiner determined the K1 writer, Doctor Rachel Dougherty, did write the questioned text and signature appearing on the the[sic] Q1 exhibit. This examiner determined the K2 writer, Richie Dougherty, did write the prescription portion of the Q2 exhibit. No determination of authorship between the K1 and K2 writers could be made regarding the Q2 Prescriber Signature line.
Z2WCXZ	It was determined that Rachel Dougherty, writer of Item K1 a-c, prepared the questioned writing on Item Q1. In addition, it was determined that Richie Dougherty, writer of Item K2a-c, prepared the questioned writing on Item Q2 (excluding the Prescriber Signature). A definite determination could not be reached whether Rachel Dougherty, writer of Item K1 a-c, or Richie Dougherty, writer of Item K2a-c, did or did not prepare the questioned Prescriber Signature on Item Q2 due to handwriting characteristics not accounted for in the available known writing. However, handwriting characteristics were observed which indicate that Richie Dougherty, writer of Item K2a-c may not have prepared the questioned Prescriber Signature on Item Q2. If future handwriting examinations are desired on the questioned Prescriber Signature on Item Q2, extensive dictated and undictated known writing should be obtained from Rachel Dougherty, writer of Item K1 a-c, Richie Dougherty, writer of Item K2a-c, and anyone else suspected of having prepared the questioned Prescriber Signature on Item Q2.
Z9B64P	In my opinion: 1. I find conclusive support for the proposition that the non-signature entries on item Q1 were completed by Rachel Dougherty. 2. I find conclusive support for the proposition that the non-signature entries on item Q2 were completed by Richie Dougherty. 3. I find conclusive support for the proposition that the signature on item Q1 was completed by Rachel Dougherty. (In the cases of 1, 2 and 3 above, I consider the possibility of another author having completed these entries to be so small it can be ignored.) 4. I find very strong support for the proposition that the signature on item Q2 was completed by an individual other than Rachel Dougherty. 5. My findings are inconclusive as to whether or not Richie Dougherty completed the signature on item Q2, and I am unable to exclude or identify him as being the author of this signature.
ZEG2NP	i. It has been concluded that the questioned writing and the questioned signature 'R. Dougherty' on Exhibit Q1 were executed by the K1 (a-c) specimen writer (Rachel Dougherty). ii. No evidence of significance was found to indicate that the questioned writing and the questioned signature 'R. Dougherty' on Exhibit Q1 were executed by the K2 (a-c) specimen writer. iii. No evidence of significance was found to indicate that the questioned writing and the questioned signature 'R. Dougherty' on Exhibit Q2 were executed by the K1 (a-c) specimen writer. iv. It has been concluded that it is highly probable that the questioned writing on Exhibit Q2 was executed by the K2 (a-c) specimen writer. v. No evidence of significance was found to indicate that the questioned signature 'R. Dougherty' on Exhibit Q2 was executed by the K2 (a-c) specimen writer.
ZHEKPN	Upon reasonable professional certainty it is my opinion comparing Q-1 with available Standards for Comparison that: Q-1 writing and signature were written by author of K-1. The opinion level is highest degree of certainty. It is my opinion comparing Q-2 with available Standards for Comparison, that Q-2 writing, excluding signature, was written by the author of K-2. The opinion level is highly probable level of certainty. It is my opinion comparing Q-2 with Standards Available for Comparison that Q-2 signature was probably not written by the author of K-1 or K-2. Opinion is at probable level of certainty. More request writing of K-2 is needed to possibly raise opinion level. More known signatures of K-1 are needed to raise opinion level. Should request writing of any other individual in this investigation become available, please contact me.

Additional Comments

TABLE 3

WebCode	Additional Comments
22QFA8	In the "Remarks" section of the report I would write: 1. In reference to Conclusion 3, the comparisons were hampered somewhat by the difference in style of the questioned signature and the specimen signatures. The questioned signature is partially handprinted and partially handwritten and is not fully comparable to the specimen signatures. 2. Opinions concerning non-original writings (i.e. reproductions) are expressed on the basis that the non-originals examined are accurate representations of the original documents. Note: Since the handprinting on Q1 and Q2 and the signature on Q1 have been identified, no comparison was conducted with the specimens from the other writer. Therefore, a blank line was inserted in the boxes on page 2 of the data sheet.
2KZKMJ	In Richie Dougherty's writings (K2), the ovals are clockwise and the small stick of the "t" is written from right to left which is indicated[sic] he is probably left handed. In the questioned signature Q2, the strokes seem to be produced in the opposite direction but we don't have sufficient graphic material to be sure that the observation is right. Furthermore, the stroke direction is very difficult to be appreciate on a photography.[sic] If we had the original questioned document Q2, we could conclude about Richie Dougherty's participation.
3C4YZH	The specimen signature on K2c was different in structure from the questioned signature whereas the specimen signatures of "Richie Dougherty" on documents "K2a" and "K2b" were simulation specimen signatures and not suitable for comparison with the questioned signature on questioned prescription "Q2".
3KWELF	* "R. Dougherty" signature on Q-2 is partially printed. "R. Dougherty" samples written by K-2-a thru K-2-c (Richie Dougherty) are in cursive (written). Some agreement and some differences were noted in this Questioned and Known furnishing the basis for the inconclusive on Richie Dougherty.
3M26RU	It is impossible to analyze the pressure, shading of graphical lines and construction of details of letters on the examined photographs.
3MN4GU	The signature on Item Q2 is primarily hand printed, therefore, because of a lack of hand printed signatures from either subject, the opinion is that no conclusion as to identity could be rendered. Signature exemplars and collected signature standards prepared with hand printing, if available, should be submitted for examination.
3Q3TMK	Whether the questioned signature on Q2 was written by Richie Dougherty, we choose "C" response. In our examination process, we found some characteristics of the signature on Q2 were coincidental with K2, but some other characteristics of the signature on Q2 were different with K2. We can not evaluate which characteristics were essential.
3Z789H	The questioned "R Dougherty" on Item Q-2 contained some features similar to and some features different from those in the known Rachel Dougherty signatures. There wasn't sufficient evidence to determine if the questioned signature was demonstrative of an alternate style, disguise or a product of a different writer.
4C3NHJ	The conclusion regarding the Exhibit Q2 prescriber signature reflects our laboratory's use of the nine-point scale as published in the ASTM guidelines for handwriting examinations.
4NDWPH	Rachel Dougherty: The questioned "R Dougherty" signature on the Tom Diggs prescription (Exhibit Q2) does not correspond to the known signature samples provided and appears somewhat awkwardly made. The use of first initial and last name, "R Dougherty", without punctuation suggest familiarity with her signature style and, as such, may not be truly representative of the writer's normal, natural, writing habits. The original "Tom Diggs" prescription would be helpful in determining whether or not her signature has been simulated on to the questioned document. Some additional exemplars made with the awkward hand along with more casually made known uncontested normal course of business signatures of hers written prior to July 16, 2011 would be helpful as an aid in determining her range of variation and may result in a more definitive finding. Richie Dougherty: The cursively made exemplar signatures provided were not comparable to the questioned signature and more comparable exemplar signatures printed in the name "R Dougherty", including some written with the awkward hand, are needed for a more detailed examination of the signature.

TABLE 3

WebCode	Additional Comments
4T72CU	In normal casework indentation and ink examinations would be conducted for both questioned documents. If the original prescription pad could be obtained this would also be examined for indentations.
644GHB	The original document should be submitted in order to determine line direction. The submission of additional known writing may result in a more definite conclusion. The additional specimens should consist of twelve to twenty repetitions of the questioned entries all on separate prescription forms.
6LJNU8	In respect to the signature in sample Q2 and samples of Richie Dougherty there were found both similarities and differences. As samples are copies it is not possible to verify the features concerning the writing line. According to the findings no crucial conclusions could be made but the found similarities are of that kind that it is possible that Richie Dougherty is the writer (still conclusion C in the scale).
7794VF	The K-1 and K-2 writers cannot be identified or eliminated regarding authorship of the questioned signature appearing on the Q-2 exhibit. Variations between the writings are present that cannot be reconciled with the available standards. These variations can be attributed to not having a sufficient number of standards or being either elements of disguise or simulation or written by another person.
7A43ZD	Despite some resemblance with the writings of Mrs Rachel Dougherty, the signature on Questioned document Q2 presents characteristics that differ from the characteristics we see on the known documents from Mrs Rachel Dougherty. Those characteristics may not, as such, be inferred as natural variation. Furthermore, the reproduction process used to provide the specimens prevent a complete and satisfactory examination of the documents. Therefore, we would like to see the originals of all the submitted documents and more comparison documents from Mrs Rachel Dougherty.
7D743V	Due to the presence of unexplained characteristics, limited quantity of undictated known signatures, and limited comparability with K2a-K2c, no conclusion could be reached whether the Q2 signature was prepared by the writer of K1a-K1c or the writer of K2a-K2c.
7MT4CD	The expert opinion must be ratified with the questioned document original concept to deliver sustainable and reliable technical expert.[sic]
7TKADU	No conclusion due to unexplained variations based on available known writing.
82ACWG	Signature questioned in Q2, cannot be identified or eliminated, because it does not comply with the general recommendations required by the laboratory for samples supplied for study, to carry out a good match. It is necessary that the samples are: abundant, similar, identical, cintemporary[sic], and original spontaneity.
8BWBMM	No conclusion could be reached whether the questioned signature on Item Q2 was or was not prepared [sic] Rachel Dougherty, Item K1a-K1c, or Richie Dougherty, Item K2a-K2c, due to a lack of sufficient comparability.
8D3TRA	The prescriber signature on Q2 appears to be a different color tint than the rest of the writing. If the originals had been submitted, a non-destructive ink examination using the VSC would have been conducted. If the originals had been submitted, the examination for indented writing using the ESDA would have been conducted. Examination of the original prescriptions would have allowed a determination as to whether Q1 and Q2 share similarities in the paper and the printing process.
8FB2WN	The signature in Q-2 is a combination of handwriting and hand printing. It is not suitable for comparison and cannot be identified or eliminated as being written by either K-1 or K-2.
8URY2P	More definitive conclusions may be reached with the submission of additional request and non-request known writing of Dr. Rachel Dougherty (K1) and Richie Dougherty (K2). The additional known writing should contain hand printing of the name "R. Dougherty".

TABLE 3

WebCode	Additional Comments
9Q7C6V	1. Further to Conclusion #3 above, the comparisons of the specimen signatures with the questioned signature on Exhibit Q-2 were hampered by the non-comparable style of the specimen and questioned signatures; the questioned signature was partially printed. Comparison of the questioned signature with the specimen handprinting on Exhibit Q-1 and Q-2 was hampered by the limited comparability of letter combinations. The comparisons were further hampered by the simplistic nature of the questioned signature. 2. The examination and comparison of the photographs was completed with the assumption that they are true representations of original documents. Note: Where there are Identification conclusions, no comments are made on the other writer(s). When one writer is identified as having executed questioned material, all other writers are hence eliminated.
9Q8AD6	This was a good test, typical of the type of problem that we examine on a regular basis.
9RZA7A	More known writings of the writer K1 is needed in cursive & block lettering. Also, the originals would be requested.
9U38JN	Q2 signature is a combination of printed and cursive writing, and there is no such combination in the signature exemplars submitted. However, when analyzed, there are some characteristics in common between the signature, Q2, and the signature in K1 and writing in K2. But, neither Rachel or Richie Dougherty can be identified as the writer of the signature in Q2, because the Q2 signature lacks sufficient comparable identifying characteristics found in K1, and in K2.
A8M8PG	Request submission of additional exemplars from writers of K-1 and K-2 handprinting the name R. Dougherty multiple times each.
AFZWQA	Additional exemplars of comparable cursive and printed signatures from both the K1 and K2 writers would have to be submitted in order to conduct a further comparison. In this case we felt that it was necessary to have the original writing. The images provided did not reflect the level of detail that was needed in this case. We would have performed ESDA and VSC examinations on the two documents, and possibly a chemical analysis of the inks used for comparison.
AXHZAG	The signature on Q2 shows a degree of similarity in comparison with the known of Rachel Dougherty and as such may represent an attempt to simulate her signature. The signature therefore is not truly comparable with the reference material, other than to note that it differs significantly from the known of Rachel Dougherty.
BAULWM	Some of the fine detail within the handwriting on document Q2 is difficult to determine - therefore I am reluctant to offer a conclusive opinion.
BH4BAL	Signature Q-2 exhibits characteristics of both writers K1a-c and K-2a-c while also displaying characteristics that do not appear in either K1a-c or K2a-c.
BNP9Y9	Despite some similarities between the questioned signature on item Q2 and the known writings of Rachel Dougherty, some discrepancies exist which cannot be explained with the known writings submitted. Additional known writings of Rachel Dougherty as well as the original document Q2, are required to pursue the analysis.
BVQDY6	Submission of additional requested known writing samples by Rachel and Richie Dougherty could enhance a subsequent examination of this case and may result in a more conclusive opinion. These samples are: Requested - These samples should be taken on forty (40) sheets of paper, duplicating the questioned document in size, shape, and format. The questioned R Dougherty signature should be printed on half of the exemplars and the remaining written in cursive verbatim, at the direction of the investigating officer. Do not allow the writer to see the questioned signature prior to producing the samples, and remove each exemplar from view after it has been written. Collected - Provable writing samples that were produced in the past during the course of the subject's normal daily affairs, such as legitimate mortgage documents, job applications, court records, etc. These samples help verify that the writing samples taken at the request of the investigating officer are normally written. These samples also offer a broader range of an individual's writing for examination and should encompass the same time period as the questioned document.

TABLE 3

WebCode	Additional Comments
BW6PWA	Additional handwriting from the K.1 & K.2 writer is requested repeating the name R Dougherty. Twenty specimens printed and cursive on separate forms along with additional non-request writing may provide an additional basis for examination. The original questioned prescriptions are requested for a microscopic, printing technology, indented writing and non-destructive ink examinations. Directional pen flow of the (right to left and left to right) questioned and differences noted with the K.1 and K.2 writers requires additional examination. The prescription tablet(s) are also requested for submission for indented writing examination and printing technology examination.
BWPGQU	Should print style "R Dougherty" signature exemplars be obtained from Rachel Dougherty and/or Richie Dougherty, and if requested, inter-comparison examinations will be conducted.
CA7MA9	We can't identified the signature of document Q2 because it's a forged signature by counterfeiter signature.[sic]
CKP8KX	Original documents and more comparable and contemporaneous specimen handwriting and signatures from both writers would assist further examination on the signature on Q2.
CVM9W2	The signature of the questioned prescription dated July 16 2011 and quoted Q2 belong to a person not present in the comparison. The nature of the sample of digital imaging instead of the seal samples requires some precautions. [sic]
D6BBWN	Item Q2 signature is smaller in size, inconsistencies observed between the Item Q2 signature and known writing, characteristics observed in the questioned signature that were not observed in the known writing, and Item K2 writing is not sufficiently comparable.
D6M3N6	There are some different and similar features between the questioned signature Q2 and known writing of Rachel Dougherty. Because of the similarities - found especially in the collected samples - can't be eliminate her, but these features are not sufficient to determine that the signature was or probably was written by K1. More, mostly collected specimens are required and further examinations are desired. [sic]
D7GZT6	Rachel is require samples produced in earlier times to identify the evolution of his writing and determine whether the document signed in blank Q2.[sic]
DJ8QWH	The initial part of the signature in Q2 has characteristics of Mr. Richie Dougherty's signature, but the end has characteristics of Mrs. Rachel Dougherty's signature. For this reason, we can't say who wrote the signature in Q2.
E9LQVE	We took the materials as if they had been originals and not reproductions (although assessing some of the details was more guessing). In a real case conclusions would be B and D instead of A and E.
FDEAC3	There are both similarities and differences between the signature appearing on the questioned log-in form Q2 and the comparison Rachel Dougherty sample; the examiner is unable to determine the significance of these similarities and differences.[sic]
FJGAV6	Divergences were observed between the signature on Q2 and all the specimen handwriting and signatures, of K1 and K2. It was not possible to determine whether these divergences are the result of differences in style; disguise or execution by another writer.
FKUY3N	The finding stated above, para. 2, is limited as the questioned signature may not reflect[sic] the normal handwriting habits of the writer and may be the result of an attempt to simulate a genuine "Rachael[sic] Dougherty" signature.

TABLE 3

WebCode	Additional Comments
FL7H3L	No conclusion could be reached as to whether or not Rachel Dougherty, K1a-c, or Richie Dougherty, K2a-c, prepared the signature on item Q2, due to the lack of comparable known writing and characteristics in the questioned writing which could not be accounted for on the basis of the available known writing. If future examinations are desired, dictated and undictated known writing should be obtained from Richie Dougherty, K2a-c, or any logical suspect(s). The known writing should be handwritten and hand printed and comparable to the questioned writing in wording and format. Dictated known writing should be obtained on separate prescriptions similar to the questioned specimens, and should be removed from the writer's view upon completion. Numerous repetitions may be necessary in order to obtain naturally prepared writing. Undictated known writing consists of handwriting and hand printing prepared during normal course of business activity. Possible sources of undictated known writing include business papers, letters, canceled checks, and/or applications.
FUHV34	The response "C" was used on question #2 in reference to Q2 and K2 due to the lack of comparable letter forms and hand printed style. It will be necessary to obtain twenty-five (25) "R. Dougherty" hand printed standards as well as obtaining twenty-five (25) cursive "R. Dougherty" signature standards. Additional extended hand printed standards may also be of benefit.
G4M3G4	When comparing the Q-2 questioned signature with the K1 exemplars, there are points of both similarity and dissimilarity. When comparing the Q-2 questioned signature with the K2 exemplars, there are numerous points of dissimilarity. This may lead one to believe that the K1 writer could have written the Q-2 signature, which is true. It is possible that the K1 writer wrote the Q-2 signature, and I have not yet examined enough K1 genuine exemplars to come to this conclusion. It's also possible that the K1 writer wrote the Q-2 signature and intentionally altered the signature, thus attempting disguise. However, it is also entirely possible that the K2 writer, or someone else, attempted to simulate a genuine K1 signature and was skilled enough to do so with speed. Observing points of similarity along with points of very clear dissimilarity are often classic signs of a simulation (writer paid attention to some characteristics and not to others). The evidence in this case does not lend itself to making a conclusive opinion toward any of these possibilities. Thus, "C" was chosen as a response for the Q-2 questioned signature.
G8KM6Z	Due to lacking of the original prescription (Q2) and the others[sic] supporting documents, we are not able to judge the beginning stroke, ending stroke and the writing direction of letter 't' in the questioned signature on Q2.
GELXGK	1. Although the comparable portions of the Q2 signature and the K1 and K2 writing exhibit significant differences, I cannot conclude that the known material represents the range of variation for writer Richie Dougherty or Rachel Dougherty. 2. An examination of original material may have disclosed additional evidence.
GGC4T6	1) The identification of any questioned writing to a specific writer (see both handwriting conclusions and signature conclusion #1 above) effectively precludes the involvement of any other potential writer. 2) With respect to signature conclusion 2a above, this comparison was restricted by the lack of comparable specimen writing in terms of the writing style and specific letter combinations. As a result, it was not possible to fully assess the writer's ability to produce a 'disguised' signature displaying features like those observed in the questioned signature.
GGPTY3	If you wish to continue your investigation from a handwriting standpoint, original questioned and known writings should be submitted for comparison. Additionally, original prescription forms Rachel Dougherty is known to have filled in or signed should be submitted for handwriting comparison as well as physical comparison. Due to the apparent narrow range of variation exhibited in the known writing of both subjects, additional, original signatures from Rachel Dougherty and Richie Dougherty signing the name "RDougherty" should be submitted for comparison. These verbatim writings should be obtained in a writing style similar to those presented in the questioned writing, for example, cursive handwriting compared to cursive handwriting and hand print to hand print. Also, it might be useful to collect additional, original signatures from Rachel Dougherty that she has written in the normal course of business. Past CTS exams have included ink originals, toner images, color photographs and color printer images. Given the complexity of this proficiency involving near super-imposable letters, letter combinations and portions of entire words, providing color photographs, which could exhibit microscopic detail including stroke direction, would have made for a better test.

TABLE 3

WebCode	Additional Comments
GHNVQR	1. Since writer K1 was identified as having written both the handwriting and signature on exhibit Q1, the subsequent comparison of K2 writer with Q1 was not done. 2. Since writer K2 was identified as having written the handwriting on exhibit Q2, the subsequent comparison of K1 writer with Q2 was not done. 3. In reference to conclusion 3, the comparison was somewhat hampered by the difference in style of the questioned signature and the specimen signatures. The first part of the questioned signature is hand printed while the second part is handwritten (in cursive). Because of this, the questioned signature is not entirely comparable to the specimen signatures. 4. Opinions concerning non-original writings (i.e. reproductions) are expressed on the basis that the non-originals examined are accurate representations of the original documents.
GJV6RX	Due to some characteristics not observed in the available known writing & the lack of sufficiently comparable known writing available for comparison it couldn't be determined if either K1 or K2 prepared the signature on Q2.
GZQFQ2	It would be of value to submit the originals of all of the submitted exhibits for further handwriting examination. It would be of value to submit the originals of the submitted Exhibit Q1 and Q2 items for indented writing examination. It may also be of value to obtain additional specimen writing from K1 and K2 repeating the questioned Q2 signature numerous times and executed in the same style of writing as the questioned signature.
H76NKB	A definitive determination could not be reached whether or not the questioned signature on item Q2 was prepared by Rachel Dougherty, known writer of items K1a through K1c, due to characteristics in the questioned signature that were not observed in the known writing.
HJVHVJ	Due to the presence of characteristics in the Q2 signature not accounted for in the available known writing, it could not be determined whether the Q2 signature was prepared by Rachel Dougherty, the writer of K1(a-c), or Richie Dougherty, the writer of K2(a-c).
HK7JJ4	Our result for Q2 signature as[sic] result C for Rachel + Richie Dougherty: Whilst there are pictorial similarities between the signature on Q2 and the known signatures of Rachel Dougherty, there are differences in the fine details. The pictorial similarities are such that either the Q2 signature is a genuine signature of Rachel Dougherty, lying outside the range of variation exhibited in her known signatures, or it is a simulation of her known signature. We consider the second possibility to be much more likely. Given that we consider it to be much more likely that the Q2 signature is a simulated signature, we cannot comment on the ability of Richie Dougherty, or anyone else, to produce this questioned signature.
HN43JG	The photographs that [sic] sent for the examination are assumed to be true and accurate reproductions of the original documents.
J2NXGT	Although similarities and dissimilarities exist between the Q2 signature and the K1 and K2 signature exemplars, the possibility of simulation, disguise, or an alternate signature style precludes even a qualified opinion. Additional exemplar signatures, in the same style if possible, would be needed for further examination.
J3M28H	Re: Comparison between Q2 and K1: The Q2 signature lacks complexity and is executed in a combination of hand printing and cursive. The K1 signature specimens are a complex combination of hand printing and cursive. There are both similarities and differences seen in the Q2 and K1 signatures. Therefore, the K1 writer has neither been identified nor eliminated as the writer of the Q2 signature. Re: Comparison between Q2 and K2: The Q2 signature lacks complexity and is executed in a combination of hand printing and cursive, whereas the known specimens are fully cursive. Therefore, a meaningful comparison and examination between the Q2 and K2 signatures could not be performed. The K2 writer has neither been identified nor eliminated as the writer of the Q2 signature. Submission of an adequate quantity of additional K1 and K2 specimen signatures similar in format to the signature on Q2 may result in more definitive findings.

TABLE 3

WebCode	Additional Comments
J4ZHJB	It could not be determined if the questioned signature appearing on Item Q2 was or was not prepared by Rachel Dougherty, writer of Item K1a-c, or Richie Dougherty, writer of Item K2a-c, because characteristics were observed within portions of the questioned signature which suggest that the writing may have been an attempt to simulate and/or trace an authentic signature(s). Simulated and traced signatures do not contain the natural handwriting characteristics of the person that prepared them; therefore, it is unlikely that the questioned signature will be associated with any known writer through handwriting comparisons.
JDZAPF	No conclusion could be reached whether Rachel Dougherty, K1a-c, or Richie Dougherty, K2a-c, prepared the questioned signature on Q2, due to the presence of characteristics in the questioned signature that are not present in the available known writing and the lack of sufficient comparable "R Dougherty" signatures.
KNY3X8	The Prescriber's Signature on Q2 is pictorially similar to the sample signatures of K1 indicating K1 wrote it; however, there are discrepancies in the size, spacing, and style. Additional sample from K1 writing the name in print and cursive may be helpful in determining authorship. There are enough pictorial differences between the Prescriber's Signature on Q2 and the sample signatures of K2 to warrant an indications[sic] K2 did not write it; however, the writer appears to have the skill level needed to write Q2. The size and the spacing of the sample signatures in K2 are similar to the questioned signature in Q2. Additional sample[sic] from K2 writing the name in print and cursive may be helpful in determining authorship.
KQ6QBC	We have used the response "C" for the signature Q2 for the following reasons: There is only one genuine and unrelated signature for each specimen. This is too less[sic] to appreciate the variability in the signatures of K1 and K2. The findings in the signature Q2 are indefinite. The signature Q2 could be a variation of K2 or an imitation.
KUPD96	No conclusion on prescriber's signature on Item Q2 due to the photograph lacking the detail necessary to determine if it is in fact a simulation, tracing, or autoforgery. Such a determination can only be made from the original document.
KYF3AU	Not meant to be used for investigative purposes; would not be included in the report to investigator. Additional comments regarding the "C" response on the Q2 signature entry: K1 - Need random course of business signature entries on prior prescriptions to compare to Q2 signature. Only one known "non-request" signature on K1c; need more. K2 - Q2 signature is a mixture of hand printing with some cursive formations. K2 hand printing has more quality and speed than shown in cursive writing; need more hand printed "R Dougherty" from K2 writer.
LC622W	The handwriting examination of the RDougherty signature depicted on Item 2 (Q2) was limited because the signature has characteristics associated with unnatural writing. When a signature is produced unnaturally it can make the identification or elimination of a writing more difficult.
LW7FCF	No determination could be made as to whether or not the excluded signature was produced by either of the exemplar writers. This signature was prepared with both printing and cursive writing. The exemplar signatures provided from both writers were prepared with all cursive writing. Although the exemplars provided from both writers did contain some hand printing it was not in the question signature area and therefore was a limiting factor in this comparison. It should be noted that some agreement and disagreement was noted between this questioned signature and the exemplars from both exemplar writers. In view of the above and the possibility that someone may have simulated this signature, no determination can be made as to who prepared it.
MB36FR	A mother and son will likely have familial handwriting characteristics. These handwriting characteristics are shared characteristics that can be found within families. In order to come to a more conclusive opinion regarding the author of the questioned signature on Q2, additional exemplars from both persons would be required. And the opinion may still be inconclusive. [sic]
MCR99Y	As information, it may be beneficial to submit the original documents of Exhibits Q-1 and Q-2 for writing ink analysis and indented writing examination.

TABLE 3

WebCode	Additional Comments
MZKEYA	The submission of at least twenty-five cursive and printed samples of Richie Dougherty writing the name "R. Dougherty", and at least twenty-five normal-course-of-business signatures and printed names of Rachel Dougherty may provide the basis for additional conclusions.
MZNUFG	The handwriting standards of Richie Dougherty exhibited a greater skill level of ability than that reflected in his exemplars. I would have liked to have had additional handwriting standards and exemplars from both Richie and Rachel Dougherty. The additional handwritings could have resulted in a more definitive conclusion. It was a tough call trying to decide if Rachel or Richie were involved in making the signature on Q2, but there was no indications that the signature was simulated and it does not appear that Richie had the cursive handwriting ability to produce his mother's signature in the manner reflected on Q2.
NAM38X	The questioned signature being imitated implies that the person who did the imitation tried to impersonate the writing personality (writing features) of the genuine signature writer trying to get rid of (disguise) his own personal writing features, so the signature even thug[sic] can be proven to be forged or imitated, but very hard and most probably impossible to proven[sic] who did the imitation.
P8CHYN	In the "remarks" section of my report, I would request additional non-request writings and signatures of both Rachel and Richie Dougherty. At the time of receipt of the additional known standards, I would conduct a re-examination of the signature found on exhibit Q2.
PG7EBQ	If we had had the original evidence, we would be able to have examine characteristics such as stroke direction, physical or chemical manipulations, links between letters, initial and final strokes. Futher more we could see characteristics such as the behaviour of the ink at different lentgh waves. [sic]
PWFC6Q	The questioned signature on Q2 may be not freely written.
Q4TJKU	Some similarities but also differences appeared between the "R Dougherty" signature on Q-2 and the writings of Ms. Rachel Dougherty (K-1 (a to c)[sic]. More comparison writings of Ms. Dougherty are needed at this point to complete the analysis. The original of document Q-2 must also be submitted to control every characteristics.[sic]
QFNUX8	Due to an insufficient amount of comparable known writing, the writer of Exhibit K2a-c (Richie Dougherty) could neither be identified, nor eliminated as the writer of the questioned signature on Exhibit Q2. Additional normal-course-of-business writings including the name "Dougherty" may provide more information to be able to render a more conclusive opinion.
QKKGNA	An inconclusive result was reached with respect to the signature on Item Q2 due to characteristics in the questioned signature which were not accounted for in the submitted known writing of Rachel Dougherty, K1a-c.
QKX2GK	Differences were observed between the sig on Q2 + the specimen sig K1 + K2. Based on the signature examined, Q2 is not a genuine K1 or K2 signature. I am unable to determine who produced the Q2 signature and therefore my opinion is inconclusive.
QKYXPU	Q2 signature - based on the standards provided this may not be the normal natural signature of the purported K1 writer. The signature may contain elements of disguise or simulation. There are variations unaccounted for in the K1 and K2 standards as provided and therefore the K1 and K2 writers can not be identified or eliminated.
R24MK7	Would want more collected specimen cursive writings from contributor, Richie Dougherty, to see more of the writer's range of writing abilities and habits.
RBNAZ2	We generally don't have any issues with examining photographs of questioned documents but the quality of the signature on Q2 in this case wasn't that good - we did have issues with assessing stroke direction which would have been easier from an original.
T447TY	The letters of the signature in prescription (Q2) could have been written in a controlled way. Therefore we could not identify or eliminate the signature in prescription (Q2).

TABLE 3

WebCode	Additional Comments
T4KHDP	Lack of cursive writing in non-requested knowns. Possibility of disguise in questioned and knowns, observed in knowns. Cannot discount the possibility of an alternative writing style w/limited knowns - quality and quantity. Familial issue - family - similarities.
TMG27Q	Exhibit Q2 signature does not display normal handwriting characteristics of either of the specimen writers; hence known writing submitted for both writers does not offer an adequate amount of identifying characteristics for proper assessment.
TRTRU7	The comparison of the questioned prescriber signature on Q2 with the known writing of Rachel Dougherty and Richie Dougherty was limited by the small amount of comparable known signatures submitted. The examination of additional known course of business and/or request signatures of Rachel Dougherty and Richie Dougherty may provide the basis for more conclusive opinions.
UB7NVH	The questioned signature appearing on Q2 is pictorially dissimilar to the K1 and K2 comparison signature samples other than a slight resemblance to the terminal "herty" portion of the K1 signature samples. This could be due to the writer using a freehand signature based on a mental model of the signature sample, the writer using a disguise process to change the pictorial appearance of the signature or there is another form of the signature not represented in the samples supplied for comparison.
UXRTAQ	2b - remark: Inconclusive opinion/result due to incomparable specimen material (e.g. limited specimen cursive).
V6QHQQ	Loupe and copier used for examination/notes.
WDEZAV	Concern regarding instructions given to specimen writers for K1a/K1b/K2a/K2b formatting of dates suggests too much guidance, or were they shown Q1 and Q2 to "copy"?
WR2V3E	H/W: Q1/K1. "te" formation is in Questioned to Specimen.[sic] In specimen the cross bar of the "t" connects with the following "e" formation. This may be an isolated difference. One formation appears to be written on an informal note and one formation is one[sic] a formal document. Both writings are right handed. Q1 shows indications of right handedness & K2 shows indications of left handedness. H/W Q2/K1. Q2 has indications of left handedness, K1 has indications of right handedness. SIG: The questioned signature Q2 is partially printed writing and not 'signed'. There are indications of right handed writing. H/W Q2/K2. Both Q and S writings are simplistic writing, which although showing some similarities make identification risky. SIG. Q2/K2. Appears to be partially printed signature, printed not signed in part, with "t" show indications of handedness. **Signature on Q2 may have a different writer to the Handwriting on Q2/attempted disguise cannot be ruled out.
WTUUBL	The questioned handwriting on the questioned prescription "Q2" was found to be written by the writer of the specimen handwritings "K2a" to "K2c" ("Richie Dougherty") and therefore, it was likely that the questioned signature on "Q2" was also written by him. However, this questioned signature was found to be different from the specimen signatures of "Richie Dougherty" and it could be a disguised signature either written by "Richie Dougherty" or written by another person. As such, I am not able to identify or eliminate him as the writer of this questioned signature.
WUNNPG	The stroke pattern of Richie is present in the writing of Q2. An example is the formation of "eed" in "needed" and "exceeded[sic] in Q2 and "need" in K2C. The spacing of Richie's known signature from K2c is similar to the spacing of the signature of Q2. Rachel's signature on the "While you were out" note on K1c was overlayed onto the signature of Q1. The text of the prescription on Q1 was overlayed onto K1a and K2a. The text was almost a perfect match with the exemplar in the lower left of K1a. Although portions of Richie's known signatures in K2a match portions of the signature in Q1, the quality of the signature in Q1 is superior to Richie's known signatures in K2a and K2c. Therefore Q1 was not written by Richie. Although portions of Rachel's known signature matches portions of the signature in Q2, there is insufficient evidence to identify Rachel as the signatory of Q2.

TABLE 3

WebCode	Additional Comments
XADAQM	(From 3-(4) above) A. Some similarities in proportions, design, and slant between the known signatures on K1 and the questioned signature on Q2 were observed in the last half of the signature. However, the lack of comparable features in the first half of the signature precluded even a qualified identification. B. The Q2 signature displayed a higher skill level than that found in the K2 signatures. A stronger conclusion may be possible upon the submission of additional collected signatures from the writer of K2, in order to better establish the range of variation of the requested K2 signatures.
XQFXXT	I'd ask for more known writing of the K1 writer to increase the range of variation for her known signatures because there are some similarities between the Q2 signature and her writing. There are not enough similarities to warrant an identification or even a "probable" type conclusion.
YJXXYV	Q2/K1- Reason for answer "C" due to the presence of unexplained characteristics.
YLQJZY	The submission of additional known signatures of Rachel and Richie Dougherty may result in more conclusive findings regarding the questioned Q2 signature. The known prescription, Q2, should also be submitted if possible.
YTH7L3	Additional known signatures and printed signatures of Richie Dougherty and Rachel Dougherty written during the normal course of business should be submitted for comparison. This may provide the basis for additional conclusions.
YW4THW	The signature in Q2 has signs morphologically similar to the signs made by Rachel Dougherty (K1), but these are not sufficient to establish a possible authorship.
YYA89B	Examinations of the original questioned documents would also be undertaken using the ESDA and VSC.
YYB4GL	An identification or elimination could not be reached regarding the signature line of the Q2 exhibit due to a lack of sufficient comparable signature standards submitted for both the K1 and K2 writer. Moreover, the possibility exists that the Q2 signature may have been simulated, disguised or even executed by an unknown third party.
Z2WCXZ	The Item Q2 signature, cannot be identified or eliminated due to similarities and variations observed when comparing the Item Q2 signature with the known writing of Rachel Dougherty (Item K1a-c).
Z9B64P	My findings are inconclusive as to whether or not Richie Dougherty complete the questioned signature in his mother's name on item Q2, due to the following: The style of the questioned signature is simple. I find clear differences to Richie Dougherty's own signature style (which also reads "R Dougherty"). I find some similarities but also some differences to Richie Dougherty's non-signature writing. Ordinarily in a case of this type, I would examine the inks present to determine whether or not the ink within the signature was indistinguishable from that of the surrounding non-signature writing on the prescription.

Appendix: Data Sheet

Collaborative Testing Services ~ Forensic Testing Program

Test No. 11-524: Handwriting Examination

DATA MUST BE RECEIVED BY December 05, 2011 TO BE INCLUDED IN THE REPORT

Participant Code:

WebCode:

Accreditation Release Section

CTS submits external proficiency test data directly to ASCLD/LAB and FQS-International. 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 and/or FQS-International. (Accreditation Release section on the last page must be completed and submitted.)
- This participant's data is NOT intended for submission to ASCLD/LAB or FQS-International.

Scenario:

Police are investigating the son of a doctor who is thought to have forged prescriptions using his mother's prescription pad. Investigators have collected two questioned prescriptions and several known writing samples from the doctor and her son. These known writings consist of both course of business writings and dictated exemplars of the writing on the prescriptions. Investigators are asking you to compare the known writing samples with that on the questioned prescriptions.

Items Submitted (Sample Pack HW):

Item Q1: Questioned prescription dated June 5, 2011

Item Q2: Questioned prescription dated July 16, 2011

Item K1a-c: Known writings of doctor, Rachel Dougherty

Item K2a-c: Known writings of doctor's son, Richie Dougherty

Please return all pages of this data sheet.

Examination Results

Select your responses from the following list and insert the appropriate letters in the space provided in the tables. If the wording differs from the normal wording in your reports, adapt these conclusions as best as you can and use your preferred wording for your written conclusions.

- A. Was WRITTEN by
- B. Was PROBABLY WRITTEN by (some degree of identification)
- C. CANNOT be IDENTIFIED or ELIMINATED
- D. Was PROBABLY NOT WRITTEN by (some degree of elimination)
- E. Was NOT WRITTEN by

**Should the response "C" be used, please document the reason in the Additional Comments section of this data sheet.*

1.) Which, if any, of the known writers wrote the questioned writing (excluding the signature) on each of the questioned prescriptions?

	Q1	Q2
Rachel Dougherty (K1)		
Richie Dougherty (K2)		

(Please choose a response for each writer.)

2.) Which, if any, of the known writers wrote the questioned signature on each of the questioned prescriptions?

	Q1	Q2
Rachel Dougherty (K1)		
Richie Dougherty (K2)		

(Please choose a response for each writer.)

RELEASE OF DATA TO ACCREDITATION BODIES

The following Accreditation Releases will apply only to:

Participant Code:

WebCode:

for Test No. **11-524: Handwriting Examination**

This release page must be completed and received by **December 5, 2011** to have this participant's submitted data included in the reports forwarded to the respective Accreditation Bodies.

ASCLD/LAB RELEASE

If your lab has been accredited by ASCLD/LAB and you are submitting this data as part of their external proficiency test requirements, have the laboratory's designated individual complete the following.

The information below must be completed in its entirety for the results to be submitted to ASCLD/LAB.

ASCLD/LAB Legacy Certificate No. _____ ASCLD/LAB International Certificate No. _____

Signature _____ Date _____

Laboratory Name _____

Location (City/State) _____

FQS-INTERNATIONAL RELEASE

If your laboratory maintains its accreditation through FQS-International, please complete the following form in its entirety to have your results forwarded.

FQS-International Certificate No. _____

Signature and Title: _____ Date _____

Laboratory Name _____

Location (City/State) _____

Accreditation Release	
<u>Return Instructions</u>	
<i>Please submit the completed Accreditation Release at the same time as your full data sheet. See Data Sheet Return Instructions on the previous page.</i>	<i>Questions? Contact us 8 am-4:30 pm EST Telephone: +1-571-434-1925 email: forensics@cts-interlab.com</i>

Please return all pages of this data sheet.

Page 4 of 4