

## Appendix A: Paper samples

North American papers (C) and European papers (E). Laser (L), inkjet (I), Offset (O), copier/printer (P), utility (U). Recycled (R) with percentage when available, Forest Stewardship Council approved (FSC). Whiteness (%) and color also indicated. Basis weight units: g.m<sup>-2</sup>. Some paper types, as well as basis weight, were not indicated by the suppliers.

Code	Origin	Company/Brand	Specification	Type	Use	Color	Basis weight	Surface pH
C01	Mexico	Kirkland	Signature - Professionnel Brillant	-	I	White	255	4
C02	Canada	ReproPlus50	-	R 50%	I and L	White	75	8
C03	USA	Staples	Pastel	R 30% - Acid free	P	Golden rofd, canary yellow, pink, blue, green	75	7
C04	Canada	Domtar	EarthChoice - Office paper	Mixed	P	White 92%	75	8
C05	USA	Staples	Sustainable Earth - Copy paper	95% sugar cane - Alkaline	P	White 92%	75	7
C06	USA	hp	Multipurpose paper	Mixed	P	White 96%	75	7
C07	Canada	Prairie Pulp & Paper Inc.	Step Forward Paper	80% corn / 20% FSC	P	White 92%	80	7
C08	USA	Neenah Paper Inc.	Astrobrights - Creative Expression	Acid free, lignin free	L, I, O, P	Solar Yellow, Vulcan Green, Cosmic Orange, Lunar Blue, Rocket Red	89	7
C09	USA	hp	LaserJet Paper	-	L, I, O, P	White 98%	90	7
C10	USA	Neenah Paper Inc.	Southworth - Parchemin	Mixed FSC	I and L	Ivory	90	7
C11	USA	Neenah Paper Inc.	Southworth - Granité	Mixed FSC	I and L	Ivory	90	7
C12	USA	Neenah Paper Inc.	Southworth - Lin	Mixed FSC	I and L	White	90	7
C13	USA	Neenah Paper Inc.	Southworth -Vergé antique	Mixed FSC	I and L	White	90	7
C14	Canada	Domtar	Business - Papier à lettre	R 20%	L, I, P	Venice	90	7
C15	Canada	Domtar	Business - Papier à lettre	R 20%	L, I, P	Windsor Marble	90	7

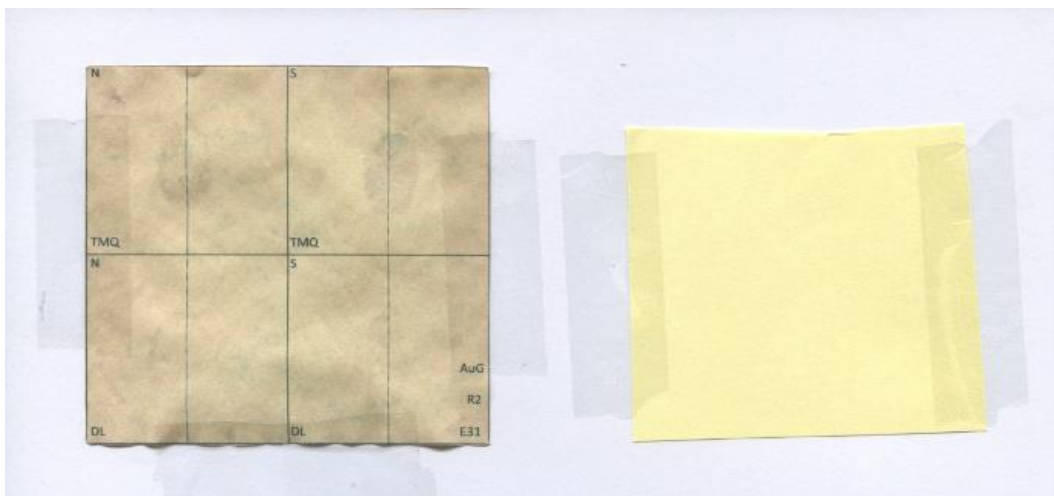
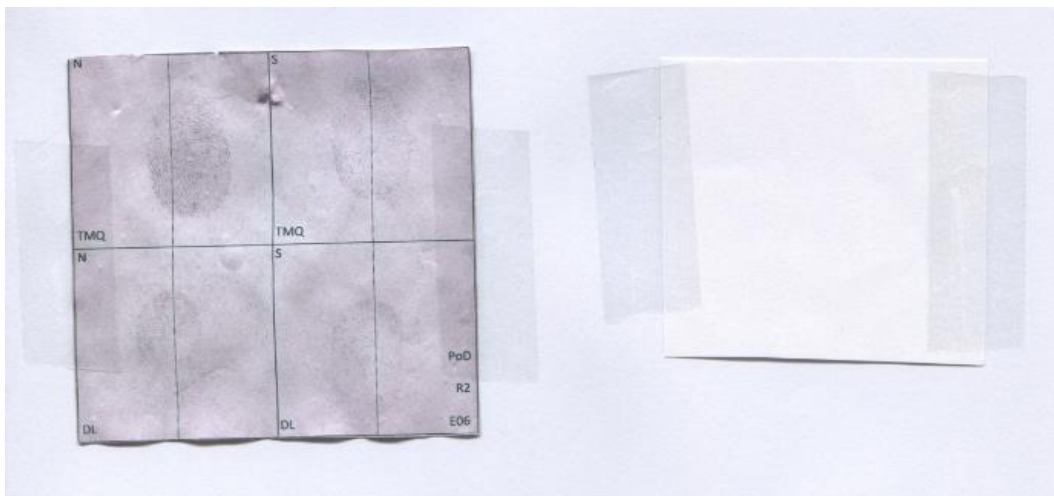
Code	Origin	Company/Brand	Specification	Type	Use	Color	Basis weight	Surface pH
C16	USA	hp	Premium Choice - Laser Paper	-	L	White 98%	120	7
C17	USA	Canon	Matte Photo Paper - MP-101	-	I	White	170	7
C18	USA	Staples	Papier à cartes	Acid and lignin free	L, I, P	Beige	250	7
C19	USA	Neenah Paper Inc.	Southworth - Parchemin (couverture)	Mixed FSC	I, L	Ivory	250	7
C20	USA	Canon	Photo paper Plus Glossy II - PP201	-	I	White	275	5
C21	USA	Staples	Tablette de papier perforé quadrillé - 22833	-	U	White	n/a	7
C22	Canada	Avery	Étiquettes CD - 5692	-	L		n/a	7
C23	Canada	Avery	Étiquettes Polyvalentes Amovibles - 6476	-	I, L	Magenta, yellow, green, blue	n/a	7
C24	USA	Staples	Protège-feuilles transparents - 10523	PVC, acid and lignin free	U	-	n/a	7
C25	Canada	Carbon Products Limited	Form-Mate	-	U	-	n/a	7
C26	Canada	Avery	Étiquettes d'adresse transparentes - 15662	-	L	-	n/a	7
C27	USA	Staples	Chemise à pochettes - 1336	Cardboard	U	-	n/a	7
C28	USA	Staples	Enveloppes d'expédition à bulles 6x9 - 17723	.	U	-	n/a	7
C29	USA	Staples	Enveloppes 5 7/8 x 9 5/8 - 594487	Mixed FSC	U	White	90	7
C30	USA	Staples	Enveloppes 5 7/8 x 9 5/9 - 194490	Mixed FSC	U	White	90	7
C31	USA	Staples	Sustainable Earth - Tablettes d'écriture	80% sugar cane residues	U	White	n/a	7
C32	Canada	3M	Post-it	R	U	Pink, green, blue	n/a	7
C33	Canada	3M	Post-it	R	U	Yellow	n/a	7
C34	USA	Staples	Étiquettes d'expédition	R Cardboard	U	Yellow	n/a	6
C35	USA	Staples	Fiches lignées - 90106	R 10% Cardboard	U	White	n/a	7
C36	USA	Staples	Tablette à réglage étroit - 66186	-	U	White	n/a	7
C37	USA	Staples	Enveloppes no1 à monnaie - 530164	FSC	U	White	105	7
C38	USA	Staples	Enveloppes no10 QuickStrip - 66396	-	U	White	75	7

Code	Origin	Company/Brand	Specification	Type	Use	Color	Basis weight	Surface pH
C39	USA	Staples	Enveloppes no10 QuickStrip - 66397	-	U	Security tint	75	7
C40	Canada	UQTR	Buvar	Bleached Kraft	U	White	n/a	6
C41	Canada	UQTR	SW,HW, Eucalyptus	-	U	White	n/a	4
C42	Canada	UQTR	Kraft couché	Kraft	P	White	n/a	7
E01	Europe	Auchan	-	-	P	White	90	7
E02	Austria	Canon Black Label zero	-	-	P	White	80	7
E03	France	Carrefour	-	-	P	White	80	7
E04	Austria	Coop	-	-	U	White	80	7
E05	Switzerland	StaplesElco switzerland Prestige	-	-	U	White	80	7
E06	France	Hp Home & Office	-	-	P	White	80	7
E07	Portugal	Inacopia Office	-	-	P	White	75	7
E08	Portugal	Inacopia Office	-	-	P	White	80	7
E09	Switzerland	Mbudget	-	-	U	White	70	7
E10	Europe	Mbudget	-	-	P	White	80	7
E11	Austria	Office	-	-	P	White	80	7
E12	Switzerland	Paetria Migos	-	-	U	White	100	7
E13	Sweden	Paetria Migos	-	-	P	White	80	7
E14	France	Paetria Premium Migos	-	-	P	White	160	7
E15	Europe	Papyrus Piano Speed	-	-	P	White	80	7
E16	Europe	Paper Team	-	-	P	White	80	7
E17	Austria	Prix Garantie Coop	-	-	U	White	70	7
E18	Germany	Sigel Office Paper Premium	-	-	P	White	80	7
E19	France	Xerox	-	-	P	White	90	7
E20	Finland	Xerox Business	-	-	P	White	80	7
E21	France	Esquisse	Envelope	R	U	Grey	80	6

Code	Origin	Company/Brand	Specification	Type	Use	Color	Basis weight	Surface pH
E22	France	La Couronne	Envelope	R	U	Brown	90	7
E23	Austria	Oecoplan coop	-	R	U	Beige	80	6
E24	France	Papeteria	-	R	P	Grey	80	6
E25	Germany	Paper Union Inapa	-	R	P	Grey	80	7
E26	Switzerland	Raygan Aligro	-	R	P	Beige	n/a	6
E27	France	Paetria	-	-	P	Pink	80	7
E28	France	Paetria	-	-	P	Yellow	80	7
E29	France	Paetria	-	-	P	Green	80	7
E30	Europe	Papyrus Rainbow	-	-	P	Pink	80	7
E31	Europe	Papyrus Rainbow	-	-	P	Yellow	80	7
E32	Europe	Papyrus Rainbow	-	-	P	Green	80	7

## Appendix B: Samples of fingermarks revelations using SMDII

Four fingerprint traces were placed on each paper sample. In the upper part are traces of the first donor, in the lower part, the traces of the second donor. In the left part, the traces are natural. In the right part, the traces are loaded (passage of the fingers on the forehead and the neck to increase the quantity of secretion of the trace). Original samples are on the right, and post-revelation samples are on the left.



## Appendix C: Rq pre and post-revelation of papers

Samples	Rq pre-revelation	Rq post-revelation	Difference
C01	0.097	0.968	0.870
C02	4.357	4.772	0.415
C03 Bleu	3.422	4.627	1.205
C03 Jaune Canari	3.479	5.647	2.168
C03 Rose	4.022	4.861	0.839
C03 Verge d'or	3.483	4.552	1.069
C03 Vert	4.489	5.654	1.165
C04	3.307	3.842	0.535
C05	3.366	4.901	1.535
C06	3.717	5.347	1.630
C07	3.779	4.791	1.012
C08 Cosmic Orange	4.370	5.015	0.645
C08 Lunar Blue	4.156	3.633	0.523
C08 Rocket Red	4.325	4.824	0.499
C08 Solar Yellow	3.808	4.341	0.533
C08 Vulcan Green	4.228	5.192	0.964
C09	3.407	4.186	0.779
C10	4.723	4.186	0.537
C11	4.063	5.934	1.871
C12	4.020	4.730	0.710
C13	4.983	5.884	0.901
C14	3.588	4.004	0.416
C15	4.000	4.149	0.149
C16	2.530	3.812	1.282
C17	3.582	5.879	2.297
C18	5.082	5.144	0.062
C19	5.323	6.498	1.175
C20	0.068	0.402	0.334
C21	4.076	3.507	0.569
C22	3.651	3.472	0.179
C23 Bleu	2.517	3.827	1.310
C23 Jaune	2.876	3.177	0.301
C23 Magenta	2.582	3.637	1.055
C23 Vert	2.538	2.974	0.436
C27 Beige	2.429	3.074	0.645
C27 Bleu	1.825	2.825	1.000
C27 Rouge	2.440	2.759	0.319
C28	5.685	6.245	0.560
C29	3.163	4.728	1.565
C30	4.069	6.450	2.381
C31	2.748	3.110	0.362
C32 Bleu	3.391	4.769	1.378

<b>Samples</b>	<b>Rq pre-revelation</b>	<b>Rq post-revelation</b>	<b>Difference</b>
C32 Rose	4.387	4.483	0.096
C32 Vert	4.089	4.086	0.003
C33	4.074	3.933	0.141
C34	4.098	4.694	0.596
C35	4.696	4.875	0.179
C36	3.274	3.556	0.282
C37	3.842	3.395	0.447
C38	3.492	4.269	0.777
C39	3.923	5.342	1.419
C40	6.069	6.105	0.036
C41	3.534	3.877	0.343
C42	4.317	4.971	0.654
E1	4.331	3.688	0.643
E10	3.970	4.069	0.099
E11	3.649	4.414	0.765
E12	3.756	3.845	0.089
E13	4.254	3.998	0.256
E14	3.059	4.447	1.388
E15	3.720	4.955	1.235
E16	3.911	4.332	0.421
E17	3.615	4.078	0.463
E18	4.329	4.173	0.156
E19	3.080	3.577	0.497
E2	3.641	4.003	0.362
E20	3.956	3.488	0.468
E21	4.075	4.311	0.236
E22	3.480	4.046	0.566
E23	3.451	4.959	1.508
E24	3.968	4.427	0.459
E25	4.328	3.281	1.047
E26	3.633	4.056	0.423
E27	4.099	4.036	0.063
E28	3.911	3.350	0.561
E29	3.711	4.351	0.640
E3	3.941	4.573	0.632
E30	4.519	4.160	0.359
E31	3.792	4.160	0.368
E32	3.570	3.825	0.255
E4	3.589	3.932	0.343
E5	3.284	3.274	0.010
E6	3.920	3.899	0.021
E7	3.795	3.900	0.105
E8	3.927	3.883	0.044
E9	3.584	4.536	0.952

