



DNA Parentage Test No. 25-5870/5

Summary Report

Each participant received a sample pack consisting of four blood samples representing a paternity case, which they were asked to analyze using their existing protocols. The test also included a paper kinship exercise where participants were asked to evaluate the provided DNA profiles and determine if a Caucasian Full Sibling relationship claim was supported. Data were returned from 93 participants and are compiled into the following tables:

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

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

Manufacturer's Information

Each sample pack consisted of a collection of known blood samples from four individuals. Participants were asked to analyze these items using their existing protocols.

SAMPLE PREPARATION: All items were prepared from human whole blood which was drawn into EDTA tubes. Stains from different sources were prepared at separate times and were packaged once they were thoroughly dried into separate envelopes.

SAMPLE PACK ASSEMBLY: One of each item was placed into a pre-labeled sample pack envelope and sealed. The sealed envelopes were then packaged in pre-labeled heat seal envelopes and sealed. Completed sample packs were stored at -20°C until shipment.

KINSHIP EXERCISE: Also included with this test was a kinship exercise that consisted of autosomal DNA profiles from two individuals for comparison. This exercise was presented as a Caucasian Full Sibling case; however, the individuals were not related.

VERIFICATION: Predistribution results were consistent with each other and the manufacturer's preparation information. Consistent allelic results were reported for all STR and YSTR loci.

Item	Donor Information	Volumes per Substrate (µL)	
		FTA™ Micro Cards (5870)	Swabs (5875)
1	Caucasian Mother	75	100
2	Caucasian Daughter	75	100
3	Caucasian Biological Father	75	100
4	Caucasian Non-Biological Father	75	100

Amelogenin and STR Results

Results compiled from predistribution laboratories and a consensus of at least 10 participants.

Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	
1	12,16	17,23	11,11	15,16	11,11	*
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13	11,2,30.2	8,9	8,8
	14,15	NM	NM	NM	NM	
2	12,16	21,23	11,14	14,15	11,13	*
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8,8
	15,18	NM	NM	NM	NM	
3	12,15	17,21	14,14	14,17	9,13	*
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8,8
	18,18	11	16	17	2	
4	14,16	18,19	10,11	16,19	11,12	*
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	5,10	20,28.2	7,8	11,11
	15,18	10	17	17	2	

YSTR Results

Results compiled from predistribution laboratories and a consensus of at least 10 participants.

Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
3	35,36	14	11,11	13	30	25	11	13	13
	15	12	11	19	31	16	16.2	11	22
	37	12	13	16	17	22	23	10	12
4	38,39	15	17,19	13	30	21	10	11	14
	14	11	13	22	31	17	16	10	25
	40	11	12	17	17	16	21	12	11

NM - Non-Male profile, YSTR results not expected.

* Results were not received from a minimum of 10 participants for the loci indicated.

Paternity Indices

Mean Paternity Index results compiled from predistribution laboratories and a consensus of at least 10 participants.

Item - Database

D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
FGA	Penta D	Penta E	SE33	TH01	TPOX
vWA					
3PI - FBI Popstats					
1.71-2.43	0-43.6	2.79-5.44	1.66-7	1.89-5.21	*
1.9-2.76	3.85-5.45	2.72-4.16	2.49-3.19	2.31-9.43	1.19-1.93
2.35-10.1	3.16-8.83	1.31-2.61	1.08-1.79	-	1.19-1.72
0-45.2	*	*	0-114	1.25-3.94	1.65-2.09
3.96-5.68					
3PI - Grand Mean $\pm$ 3STD Range**					
1.25-2.96	0-33.7	2.86-5.22	2.53-6.65	1.82-4.85	*
1.29-3.5	2.31-6.64	2.55-4.17	1.61-4.04	0-14.8	0.895-2.45
3.14-9.04	3.21-9.52	0.936-2.98	1.04-2.06	-	0.288-2.68
0.13-36.5	0-5.17	7.46-13	0-86.1	0.929-3.96	0-22.8
0.978-9.36					
3PI - NIST-STRBASE					
1.41-2.64	4.97-20	3.62-4.6	3.88-5.64	2.53-4.27	*
1.92-2.95	3.02-6.22	3.16-3.57	2.23-3.45	1.17-12.4	1.06-2.23
4.65-7.89	4.71-8.93	1.06-2.64	1.27-1.89	-	1.2-1.62
8.62-27	0.674-3.94	7.94-12	19.4-48.3	1.41-3.54	1.4-2.51
3.79-6.29					
4PI - Grand Mean $\pm$ 3STD Range**					
1.69-2.28	0-0.0162	0-0.586	0-0.0064	0-0.587	*
0.588-1.96	0-2.01	0-0.704	0-3.37	0-0.0434	0-1.26
0-0.00533	0-0.00567	0-0.00586	0-1.32	-	1.82-3.72
0-1.09	1.17-3.14	0-0.0015	0-0.0154	1.28-3.81	0-0.000437
1.77-3.23					

* Results were not received from a minimum of 10 participants for the loci and database indicated.

**These ranges are provided to allow participants that utilized databases other than the one(s) listed above to review their results. Following AABB guidelines, ranges were determined by taking the grand mean of all data submitted for the associated locus and calculating 3 standard deviations above and below that value. Data values are presented in three significant figures. Data values less than zero are presented as "0."

Summary Comments

This test was designed to allow participants to assess their proficiency in the analysis and interpretation of blood samples, along with the determination of paternity. Participants were supplied with four "known" bloodstains (Items 1 - 4). Item 1 was created from a female (mother) donor. Item 2 was created from a female (daughter) donor. Item 3 was created from a male donor who was the biological father of the Item 2 female, and Item 4 was created from a male donor who was not the biological father of the Item 2 female. Additionally, this test included an exercise where participants evaluated provided DNA profiles and reported both the kinship index and conclusions regarding an alleged relationship. For this test, the claim of a Caucasian full-sibling relationship was not supported. Refer to the Manufacturer's Information for preparation details.

Data were returned from 93 participants.

DNA Analysis

For STR results, consistent results were achieved by all but four participants who reported an inconsistent result for one or more items.

For YSTR results, consistent results were achieved by all but two participants who reported an inconsistent result for more than one item.

Paternity DNA Statistics

All participants reported that the source of Item 3 could not be excluded as the biological father of Item 2. Of the participants that reported probability of paternity values, all reported 99.9% or higher.

Kinship DNA Statistics

Forty-six participants submitted responses to the paper kinship exercise regarding the claim of a Caucasian Full Sibling relationship. For the loci likelihood ratio data, seven participants reported extreme data in comparison to the calculated mode at one or more loci. A consensus was achieved, with 39 (85%) participants concluding that the relationship claim was not supported. Of the remaining participants, six reported "Inconclusive," while one participant supported the relationship claim.

STR Amplification Kit(s) & Results

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

26EQHD-5875 GlobalFiler™ (Familias3, DNAView)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

29E3DD-5875 GlobalFiler™

1	12,16	17,23	11	15,16	11	18,19
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8
	14,15					

2CXXA4-5870 PowerPlex® Fusion

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

2L2ABE-5875 VeriFiler Express (Familias)

1	12,16	17,23	11	15,16	11	18,19
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

3KN2Q7-5870 GlobalFiler™ Express (DNAView)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	

3PGZ62-5870 GlobalFiler™ (FBI Popstats (Expanded FBI STR 2015))

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

3UU2WD-5870 GlobalFiler™ (STRLAB)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

3V97VC-5875 GlobalFiler™ (DBLR)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NR			NR	

4HTX8A-5875 GlobalFiler™ Express (DBLR V1.3.35)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

63XV4B-5870 GlobalFiler™

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15	NR			NR	

698T34-5870 GlobalFiler™ Express (DNABView)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	

6AHWLA-5870 GlobalFiler™ Express (DBLR V1.3.35)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

6JHL3B-5870 GlobalFiler™						
1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					
6PRJ34-5870 GlobalFiler™ Express (DNABView)						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	
7899LA-5870 PowerPlex® Fusion 6C (Familias v 3.3.1)						
1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8,8
	14,15					
79GHD8-5870 Identifiler® Plus						
1		17,23		15,16	11,11	
	8,10	13,14			10,12	9,13
	15,19	13,14	29,30		X,X	10,11
	20,23				8,9	8,8
	14,15					
7CFUA8-5870 GlobalFiler™ Express (DNA•VIEW)						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	
7FYP6X-5870 GlobalFiler™						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

7KUJ3Y-5870 PowerPlex® Fusion						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					
8JH69X-5870 PowerPlex® Fusion (POPSTATS)						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					
8XX7ZA-5875 PowerPlex® 5C						
1	12,16	17,23	11	15,16	11	-
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	-	8,9	8
	14,15	-	-	-	-	
8Y7EVZ-5870 GlobalFiler™						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					
9FABY7-5875 GlobalFiler™ Express						
1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					
9GKCL6-5870 GlobalFiler™ Express						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

9K49GV-5875 GlobalFiler™ (PopStats)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					

9N4FT8-5870 PowerPlex® FUSION 6C (FBI Popstats Database)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8,8
	14,15					

9P2RHT-5870 PowerPlex® 21 (Kinship Software)

1	12,16	17,23		15,16	11,11	18,19
	8,10	13,14		21,23	10,12	9,13
	15,19	13,14	29,30		X,X	10,11
	20,23	9,14	12,13		8,9	8,8
	14,15					

9ZZLL7-5875 PowerPlex® ESI 17

1	12,16	17,23	11,11	15,16		
		13,14	13,13	21,23		9,13
	15,19	13,14	29,30	16,16	X,X	
	20,23			11.2,30.2	8,9	
	14,15					

A73WLW-5870 PowerPlex® Fusion (Popstats in CODIS 11.0)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

AXP6VX-5870 GlobalFiler™ Express (DNA View)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

BNWBXR-5870 GlobalFiler™ Express (Popstats)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					

BTBQX7-5875 PowerPlex® Fusion (GenoProof® Suite)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8,8
	14,15					

CE7QTU-5870 PowerPlex® Fusion

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

CGE3AV-5875 GlobalFiler™

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15	no results			no results	

DB66B3-5870 PowerPlex® Fusion

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15	NR				

DJXGDV-5870 GlobalFiler™ Express (DNA VIEW)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

DK8JZU-5870 GlobalFiler™ Express (DNA.VIEW)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	

DTKEC4-5870 GlobalFiler™ Express

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

DZDGM9-5870 GlobalFiler™

1	12,16	17,23	11,11	15,16	11,11	N/A
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	N/A	N/A	11.2,30.2	8,9	8,8
	14,15	N/D	N/A	N/A	N/D	

E9X8FZ-5875 GlobalFiler™ Express

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

EA6NGP-5870 PowerPlex® Fusion 6C

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8
	14,15					

F7LRLY-5875 GlobalFiler™ Express (Popstats)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	-	-	11.2,30.2	8,9	8,8
	14,15	-	-	-	-	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

F9NRNP-5870 GlobalFiler™						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					
FJAVWP-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8
	14,15					
FR2BKT-5870 PowerPlex® Fusion 5C (Kln CALc 5.0.12)						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15	Inconclusive				
G3HDDZ-5875 GenePrint24						
1	12,16	17,23	11	15,16	11	--
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	--	8,9	8
	14,15	--	--	--	--	
GU6JXX-5870 PowerPlex® Fusion 6C						
1	12,16	17,23	11,11	15,16	11,11	-
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8,8
	14,15	-	-	-	-	
HJ2Q4X-5870 PowerPlex® Fusion						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15	NR				

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

HMY9AP-5870 GlobalFiler™

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15	Not Detected			Not Detected	

HNF3CK-5870 PowerPlex® Fusion

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

J6WQYK-5870 GlobalFiler™

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					

JA9Z WV-5870 GlobalFiler™ Express

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

JEMEUM-5870 PowerPlex® Fusion (Popstats)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

JLHCGP-5870 GlobalFiler™ Express (DNA View)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

JW4FPP-5870 GlobalFiler™ Express (DNA View)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	

KBJ2LN-5870 GlobalFiler™ Express (DNAMView)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	

KK7XKV-5870 GlobalFiler™ (CODIS)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

L2Q8PG-5870 GlobalFiler™ Express

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					

L6A4MU-5875 PowerPlex® Fusion 5C (GeneMapper ID-X v. 1.7.2; Familias v. 3.3.1)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13		8,9	8,8
	14,15					

L7K69T-5875 PowerPlex® Fusion System, Qiagen HDPLEX (GeneMapper ID v. 3.2.1)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8,8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

LEEB3U-5870 GlobalFiler™ (DNView)						
1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15	NR			NR	
LPXMFT-5870 GlobalFiler™						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					
MHEHCJ-5870 PowerPlex® Fusion (FBI Popstats)						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					
NTTVYT-5875 GlobalFiler™ (converge)						
1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					
NWQE2R-5870 PowerPlex®						
1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8,8
	14,15					
P6GHDC-5870 PowerPlex® 21 (Kinship (In-house software))						
1	12,16	17,23		15,16	11,11	18,19
	8,10	13,14		21,23	10,12	9,13
	15,19	13,14	29,30		X,X	10,11
	20,23	9,14	12,13		8,9	8,8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

PQW4AD-5870 GlobalFiler™

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

PT2RJN-5875 GlobalFiler™ Express

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23			11.2,30.2	8,9	8
	14,15					

Q6DFZD-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8
	14,15					

QG8WPE-5875 PowerPlex® Fusion 6C

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8
	14,15					

QVMUUE-5870 PowerPlex® Fusion (FBI Popstats)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

QYM7QE-5870 PowerPlex® Fusion (Popstats)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

TVVMVM-5870 PowerPlex® Fusion

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15	NR				

U6H6NL-5870 PowerPlex® FUSION 6C

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8,8
	14,15					

U7EGE8-5870 PowerPlex® 21 (Kinship)

1	12,16	17,23		15,16	11,11	18,19
	8,10	13,14		21,23	10,12	9,13
	15,19	13,14	29,30		X,X	10,11
	20,23	9,14	12,13		8,9	8,8
	14,15					

U87JHA-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8
	14,15					

U922JB-5870 PowerPlex® Fusion 5C (Popstats)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

UH9ZTD-5875 GlobalFiler™, MiniFiler (KinCalc)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15	no result			no results	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

URWU6A-5875 GlobalFiler™ Express

1	12,16	17,23	11	15,16	11	NT
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	NT	NT	11.2,30.2	8,9	8
	14,15	NR	NT	NT	NR	

UYQYB-5875 PowerPlex® Fusion 6C

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8
	14,15					

XLVMCB-5870 Identifiler® Direct

1		17,23		15,16	11,11	
	8,10	13,14			10,12	9,13
	15,19	13,14	29,30		X,X	10,11
	20,23				8,9	8,8
	14,15					

XYHV7H-5870 PowerPlex® Fusion (Gen Analysen)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30		X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

Y4AJ3F-5875 GlobalFiler™ IQC (DNA VIEW)

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

Y6QEXA-5870 ANDE (ANDE FAIRS)

1	12,16	17,23	11	15,16	11	18,19
	8,10	13,14	13	21,23	10,12	
	15,19		29,30	16		10,11
				11.2,30.2	8,9	8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

Y8TFX7-5870 PowerPlex® Fusion 5C						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					
YCLKQA-5875 PowerPlex® 6C (eDNA)						
1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8,8
	14,15					
YFLPDH-5875 Investigator ESSplex SE QS KIT (GeneMapper Software 5)						
1	12,16	17,23	11,11	15,16		
		13,14	13,13	21,23		9,13
	15,19	13,14	29,30	16,16	X,X	
	20,23			11.2,30.2	8,9	
	14,15					
YLDV27-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8
	14,15					
YMM6T3-5870 PowerPlex® 21						
1	12,16	17,23		15,16	11,11	18,19
	8,10	13,14		21,23	10,12	9,13
	15,19	13,14	29,30		X,X	10,11
	20,23	9,14	12,13		8,9	8,8
	14,15					
YPD7W6-5870 PowerPlex® Fusion 6C (Popstats (NIST 1017))						
1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13	11.2,30.2	8,9	8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

YRF3DE-5870 GlobalFiler™ Express (DNAVIEW ver37.55)

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X,X	10,11
	20,23			11.2,30.2	8,9	8
	14,15	NM			NM	

ZQFLJ2-5870 GlobalFiler™

1	12,16	17,23	11,11	15,16	11,11	
	8,10	13,14	13,13	21,23	10,12	9,13
	15,19	13,14	29,30	16,16	X,X	10,11
	20,23			11.2,30.2	8,9	8,8
	14,15					

ZT8MM6-5870 PowerPlex® Fusion

1	12,16	17,23	11	15,16	11	
	8,10	13,14	13	21,23	10,12	9,13
	15,19	13,14	29,30	16	X	10,11
	20,23	9,14	12,13		8,9	8
	14,15					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

26EQHD-5875 GlobalFiler™ (Familias3, DNABView)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

29E3DD-5875 GlobalFiler™

2	12,16	21,23	11,14	14,15	11,13	18,19
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8
	15,18					

2CXA4-5870 PowerPlex® Fusion

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					

2L2ABE-5875 VeriFiler Express (Familias)

2	12,16	21,23	11,14	14,15	11,13	18,19
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					

3KN2Q7-5870 GlobalFiler™ Express (DNABView)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	

3PGZ62-5870 GlobalFiler™ (FBI Popstats (Expanded FBI STR 2015))

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

3UU2WD-5870 GlobalFiler™ (STRLAB)

	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
2	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

3V97VC-5875 GlobalFiler™ (DBLR)

	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
2	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18	NR			NR	

4HTX8A-5875 GlobalFiler™ Express (DBLR V1.3.35)

	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
2	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

63XV4B-5870 GlobalFiler™

	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
2	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18	NR			NR	

698T34-5870 GlobalFiler™ Express (DNABView)

	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
2	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	

6AHWLA-5870 GlobalFiler™ Express (DBLR V1.3.35)

	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
2	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

6JHL3B-5870 GlobalFiler™						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					
6PRJ34-5870 GlobalFiler™ Express (DNAMView)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	
7899LA-5870 PowerPlex® Fusion 6C (Familias v 3.3.1)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8,8
	15,18					
79GHD8-5870 Identifiler® Plus						
2		21,23		14,15	11,13	
	8,8	14,15			9,10	9,12
	18,19	12,13	30,30		X,X	11,12
	20,26				7,9	8,8
	15,18					
7CFUA8-5870 GlobalFiler™ Express (DNA•VIEW)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	
7FYP6X-5870 GlobalFiler™						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

7KUJ3Y-5870 PowerPlex® Fusion						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					
8JH69X-5870 PowerPlex® Fusion (POPSTATS)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					
8XX7ZA-5875 PowerPlex® 5C						
2	12,16	21,23	11,14	14,15	11,13	-
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	-	7,9	8
	15,18	-	-	-	-	
8Y7EVZ-5870 GlobalFiler™						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18					
9FABY7-5875 GlobalFiler™ Express						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					
9GKCL6-5870 GlobalFiler™ Express						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

9K49GV-5875 GlobalFiler™ (PopStats)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18					
9N4FT8-5870 PowerPlex® FUSION 6C (FBI Popstats Database)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8,8
	15,18					
9P2RHT-5870 PowerPlex® 21 (Kinship Software)						
2	12,16	21,23		14,15	11,13	18,19
	8,10	14,15		18,23	9,10	9,12
	18,19	12,13	30,30		X,X	11,12
	20,26	9,12	13,16		7,9	8,8
	15,18					
9ZZLL7-5875 PowerPlex® ESI 17						
2	12,16	21,23	11,14	14,15		
		14,15	13,14	18,23		9,12
	18,19	12,13	30,30		X,X	
	20,26			22,30.2	7,9	
	15,18					
A73WLW-5870 PowerPlex® Fusion (Popstats in CODIS 11.0)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					
AXP6VX-5870 GlobalFiler™ Express (DNA View)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

BNWBXR-5870 GlobalFiler™ Express (Popstats)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18					

BTBQX7-5875 PowerPlex® Fusion (GenoProof® Suite)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8,8
	15,18					

CE7QTU-5870 PowerPlex® Fusion

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					

CGE3AV-5875 GlobalFiler™

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18	no results			no results	

DB66B3-5870 PowerPlex® Fusion

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18	NR				

DJXGDV-5870 GlobalFiler™ Express (DNA VIEW)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

DK8JZU-5870 GlobalFiler™ Express (DNA.VIEW)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	

DTKEC4-5870 GlobalFiler™ Express

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

DZDGM9-5870 GlobalFiler™

2	12,16	21,23	11,14	14,15	11,13	N/A
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	N/A	N/A	22,30.2	7,9	8,8
	15,18	N/D	N/A	N/A	N/D	

E9X8FZ-5875 GlobalFiler™ Express

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

EA6NGP-5870 PowerPlex® Fusion 6C

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8
	15,18					

F7LRLY-5875 GlobalFiler™ Express (Popstats)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	-	-	22,30.2	7,9	8,8
	15,18	-	-	-	-	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

F9NRNP-5870 GlobalFiler™						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18					
FJAVWP-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8
	15,18					
FR2BKT-5870 PowerPlex® Fusion 5C (KIn CALc 5.0.12)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18	Inconclusive				
G3HDDZ-5875 GenePrint24						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18	--				
GU6JXX-5870 PowerPlex® Fusion 6C						
2	12,16	21,23	11,14	14,15	11,13	-
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8,8
	15,18	-	-	-	-	
HJ2Q4X-5870 PowerPlex® Fusion						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18	NR				

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

HMY9AP-5870		GlobalFiler™				
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18	Not Detected		Not Detected		
HNF3CK-5870		PowerPlex® Fusion				
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					
J6WQYK-5870		GlobalFiler™				
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18					
JA9ZWV-5870		GlobalFiler™ Express				
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					
JEMEUM-5870		PowerPlex® Fusion (Popstats)				
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					
JLHCGP-5870		GlobalFiler™ Express (DNA View)				
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM		NM		

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

JW4FPP-5870 GlobalFiler™ Express (DNA View)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	

KBJ2LN-5870 GlobalFiler™ Express (DNAMView)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	

KK7XKV-5870 GlobalFiler™ (CODIS)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

L2Q8PG-5870 GlobalFiler™ Express

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18					

L6A4MU-5875 PowerPlex® Fusion 5C (GeneMapper ID-X v. 1.7.2; Familias v. 3.3.1)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16		7,9	8,8
	15,18					

L7K69T-5875 PowerPlex® Fusion System, Qiagen HDPLEX (GeneMapper ID v. 3.2.1)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8,8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

LEEB3U-5870 GlobalFiler™ (DNView)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18	NR			NR	
LPXMFT-5870 GlobalFiler™						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18					
MHEHCJ-5870 PowerPlex® Fusion (FBI Popstats)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					
NTTVYT-5875 GlobalFiler™ (converge)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					
NWQE2R-5870 PowerPlex®						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8,8
	15,18					
P6GHDC-5870 PowerPlex® 21 (Kinship (In-house software))						
2	12,16	21,23		14,15	11,13	18,19
	8,10	14,15		18,23	9,10	9,12
	18,19	12,13	30,30		X,X	11,12
	20,26	9,12	13,16		7,9	8,8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

PQW4AD-5870 GlobalFiler™

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

PT2RJN-5875 GlobalFiler™ Express

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26			22,30.2	7,9	8
	15,18					

Q6DFZD-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8
	15,18					

QG8WPE-5875 PowerPlex® Fusion 6C

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8
	15,18					

QVMUUE-5870 PowerPlex® Fusion (FBI Popstats)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					

QYM7QE-5870 PowerPlex® Fusion (Popstats)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

TVVMVM-5870 PowerPlex® Fusion

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18	NR				

U6H6NL-5870 PowerPlex® FUSION 6C

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8,8
	15,18					

U7EGE8-5870 PowerPlex® 21 (Kinship)

2	12,16	21,23		14,15	11,13	18,19
	8,10	14,15		18,23	9,10	9,12
	18,19	12,13	30,30		X,X	11,12
	20,26	9,12	13,16		7,9	8,8
	15,18					

U87JHA-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8
	15,18					

U922JB-5870 PowerPlex® Fusion 5C (Popstats)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					

UH9ZTD-5875 GlobalFiler™, MiniFiler (KinCalc)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18	no result			no result	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

URWU6A-5875 GlobalFiler™ Express

2	12,16	21,23	11,14	14,15	11,13	NT
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	NT	NT	22,30.2	7,9	8
	15,18	NR	NT	NT	NR	

UYQYB-5875 PowerPlex® Fusion 6C

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8
	15,18					

XLVMCB-5870 Identifiler® Direct

2		21,23		14,15	11,13	
	8,10	14,15			9,10	9,12
	18,19	12,13	30,30		X,X	11,12
	20,26				7,9	8,8
	15,18					

XYHV7H-5870 PowerPlex® Fusion (Gen Analysen)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30		X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					

Y4AJ3F-5875 GlobalFiler™ IQC (DNA VIEW)

2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

Y6QEXA-5870 ANDE (ANDE FAIRS)

2	12,16	21,23	11,14	14,15	11,13	18,19
	8,10	14,15	13,14	18,23	9,10	
	18,19	12,13	30	15,16		11,12
			13,16	22,30.2	7,9	8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

Y8TFX7-5870 PowerPlex® Fusion 5C						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					
YCLKQA-5875 PowerPlex® 6C (eDNA)						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30,30	15,16	X,X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8,8
	15,18					
YFLPDH-5875 Investigator ESSplex SE QS KIT (GeneMapper Software 5)						
2	12,16	21,23	11,14	14,15		
		14,15	13,14	18,23		9,12
	18,19	12,13	30,30	15,16	X,X	
	20,26			22,30.2	7,9	
	15,18					
YLDV27-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8
	15,18					
YMM6T3-5870 PowerPlex® 21						
2	12,16	21,23		14,15	11,13	18,19
	8,10	14,15		18,23	9,10	9,12
	18,19	12,13	30,30		X,X	11,12
	20,26	9,12	13,16		7,9	8,8
	15,18					
YPD7W6-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))						
2	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16	22,30.2	7,9	8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
Item	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

YRF3DE-5870 GlobalFiler™ Express (DNAVIEW ver37.55)

	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
2	18,19	12,13	30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8
	15,18	NM			NM	

ZQFLJ2-5870 GlobalFiler™

	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
2	18,19	12,13	30,30	15,16	X,X	11,12
	20,26			22,30.2	7,9	8,8
	15,18					

ZT8MM6-5870 PowerPlex® Fusion

	12,16	21,23	11,14	14,15	11,13	
	8,10	14,15	13,14	18,23	9,10	9,12
2	18,19	12,13	30	15,16	X	11,12
	20,26	9,12	13,16		7,9	8
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

26EQHD-5875 GlobalFiler™ (Familias3, DNABView)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

29E3DD-5875 GlobalFiler™

3	12,15	17,21	14	14,17	9,13	11,18
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8
	18	11			2	

2CXA4-5870 PowerPlex® Fusion

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

2L2ABE-5875 VeriFiler Express (Familias)

3	12,15	17,21	14	14,17	9,13	11,18
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18				2	

3KN2Q7-5870 GlobalFiler™ Express (DNABView)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

3PGZ62-5870 GlobalFiler™ (FBI Popstats (Expanded FBI STR 2015))

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

3UU2WD-5870 GlobalFiler™ (STRLAB)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11,11			2	

3V97VC-5875 GlobalFiler™ (DBLR)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

4HTX8A-5875 GlobalFiler™ Express (DBLR V1.3.35)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

63XV4B-5870 GlobalFiler™

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

698T34-5870 GlobalFiler™ Express (DNABView)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

6AHWLA-5870 GlobalFiler™ Express (DBLR V1.3.35)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

6JHL3B-5870 GlobalFiler™						
3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	
6PRJ34-5870 GlobalFiler™ Express (DNAnView)						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	
7899LA-5870 PowerPlex® Fusion 6C (Familias v 3.3.1)						
3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8,8
	18,18	11	16	17		
79GHD8-5870 Identifiler® Plus						
3		17,21		14,17	9,13	
	8,10	10,15			9,13	11,12
	17,18	12,15.2	30,30.2		X,Y	10,12
	22,26				6,7	8,8
	18,18					
7CFUA8-5870 GlobalFiler™ Express (DNA•VIEW)						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	
7FYP6X-5870 GlobalFiler™ (FBI Popstats)						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

7KUJ3Y-5870 PowerPlex® Fusion						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				
8JH69X-5870 PowerPlex® Fusion (POPSTATS)						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				
8XX7ZA-5875 PowerPlex® 5C						
3	12,15	17,21	14	14,17	9,13	-
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	-	6,7	8
	18	11	-	-	-	
8Y7EVZ-5870 GlobalFiler™						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	
9FABY7-5875 GlobalFiler™ Express						
3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	
9GKCL6-5870 GlobalFiler™ Express						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

9K49GV-5875 GlobalFiler™ (PopStats)						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	
9N4FT8-5870 PowerPlex® FUSION 6C (FBI Popstats Database)						
3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8,8
	18,18	11	16	17		
9P2RHT-5870 PowerPlex® 21 (Kinship Software)						
3	12,15	17,21		14,17	9,13	11,18
	8,10	10,15		18,23	9,13	11,12
	17,18	12,15.2	30,30.2		X,Y	10,12
	22,26	11,12	5,16		6,7	8,8
	18,18					
9ZZLL7-5875 PowerPlex® ESI 17 (Genoproof)						
3	12,15	17,21	14,14	14,17		
		10,15	14,14	18,23		11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	
	22,26			17,22	6,7	
	18,18					
A73WLW-5870 PowerPlex® Fusion (Popstats in CODIS 11.0)						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				
AXP6VX-5870 GlobalFiler™ Express (DNA View)						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

BNWBXR-5870 GlobalFiler™ (Popstats)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

BTBQX7-5875 PowerPlex® Fusion (GenoProof® Suite)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8,8
	18,18	11	16	17		

CE7QTU-5870 PowerPlex® Fusion

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

CGE3AV-5875 GlobalFiler™

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

DB66B3-5870 PowerPlex® Fusion

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

DJXGDV-5870 GlobalFiler™ Express (DNA VIEW)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

DK8JZU-5870 GlobalFiler™ Express (DNA.VIEW)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

DTKEC4-5870 GlobalFiler™ Express

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

DZDGM9-5870 GlobalFiler™

3	12,15	17,21	14,14	14,17	9,13	N/A
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	N/A	N/A	17,22	6,7	8,8
	18,18	11	N/A	N/A	2	

E9X8FZ-5875 GlobalFiler™ Express

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

EA6NGP-5870 PowerPlex® Fusion 6C

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8
	18	11	16	17		

F7LRLY-5875 GlobalFiler™ Express (Popstats)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	-	-	17,22	6,7	8,8
	18,18	11	-	-	2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

F9NRNP-5870 GlobalFiler™						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	
FJAVWP-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8
	18	11	16	17		
FR2BKT-5870 PowerPlex® Fusion 5C (KIn CALc 5.0.12)						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	Inconclusive				
G3HDDZ-5875 GenePrint24						
3	12,15	17,21	14	14,17	9,13	--
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	--	6,7	8
	18	11	--	--	--	
GU6JXX-5870 PowerPlex® Fusion 6C						
3	12,15	17,21	14,14	14,17	9,13	-
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8,8
	18,18	11	16	17	-	
HJ2Q4X-5870 PowerPlex® Fusion						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

HMY9AP-5870 GlobalFiler™

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

HNF3CK-5870 PowerPlex® Fusion

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

J6WQYK-5870 GlobalFiler™ (Popstats)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

JA9Z WV-5870 GlobalFiler™ Express

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

JEMEUM-5870 PowerPlex® Fusion (Popstats)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

JLHCGP-5870 GlobalFiler™ Express (DNA View)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

JW4FPP-5870 GlobalFiler™ Express (DNAAview)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

KBJ2LN-5870 GlobalFiler™ Express (DNAAview)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

KK7XKV-5870 GlobalFiler™ (CODIS)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

L2Q8PG-5870 GlobalFiler™ Express (FBI Popstats)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

L6A4MU-5875 PowerPlex® Fusion 5C (GeneMapper ID-X v. 1.7.2; Familias v. 3.3.1)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8,8
	18,18	11				

L7K69T-5875 PowerPlex® Fusion System, Qiagen HDPLEX (GeneMapper ID v. 3.2.1)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8,8
	18,18	11				

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

LEEB3U-5870 GlobalFiler™ (DNView)						
3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	
LPXMFT-5870 GlobalFiler™						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	
MHEHCJ-5870 PowerPlex® Fusion (FBI Popstats)						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				
NTTVYT-5875 GlobalFiler™ (converge)						
3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	
NWQE2R-5870 PowerPlex®						
3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8,8
	18,18	11	16	17		
P6GHDC-5870 PowerPlex® 21 (Kinship (In-house software))						
3	12,15	17,21		14,17	9,13	11,18
	8,10	10,15		18,23	9,13	11,12
	17,18	12,15.2	30,30.2		X,Y	10,12
	22,26	11,12	5,16		6,7	8,8
	18,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

PQW4AD-5870 GlobalFiler™ (DBLR)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

PT2RJN-5875 GlobalFiler™ Express

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

Q6DFZD-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8
	18	11	16	17		

QG8WPE-5875 PowerPlex® Fusion 6C

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8
	18	11	16	17		

QVMUUE-5870 PowerPlex® Fusion (FBI Popstats)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

QYM7QE-5870 PowerPlex® Fusion (Popstats)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

TVVMVM-5870 PowerPlex® Fusion

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

U6H6NL-5870 PowerPlex® Fusion 6C

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8,8
	18,18	11	16	17		

U7EGE8-5870 PowerPlex® 21 (Kinship)

3	12,15	17,21		14,17	9,13	11,18
	8,10	10,15		18,23	9,13	11,12
	17,18	12,15.2	30,30.2		X,Y	10,12
	22,26	11,12	5,16		6,7	8,8
	18,18					

U87JHA-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8
	18	11	16	17		

U922JB-5870 PowerPlex® Fusion 5C (Popstats)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

UH9ZTD-5875 GlobalFiler™, MiniFiler (KinCalc)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

URWU6A-5875 GlobalFiler™ Express

3	12,15	17,21	14	14,17	9,13	NT
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	NT	NT	17,22	6,7	8
	18	11	NT	NT	2	

UYQYYB-5875 PowerPlex® Fusion 6C (CODIS Popstats)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8
	18	11	16	17		

XLVMCB-5870 Identifiler® Direct

3		17,21		14,17	9,13	
	8,10	10,15			9,13	11,12
	17,18	12,15.2	30,30.2		X,Y	10,12
	22,26				6,7	8,8
	18,18					

XYHV7H-5870 PowerPlex® Fusion (Gen Analysen)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2		X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

Y4AJ3F-5875 GlobalFiler™ IQC (DNA VIEW)

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

Y6QEXA-5870 ANDE (ANDE FAIRS)

3	12,15	17,21	14	14,17	9,13	11,18
	8,10	10,15	14	18,23	9,13	
	17,18		30,30.2	15,16		10,12
				17,22	6,7	8
	18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

Y8TFX7-5870 PowerPlex® Fusion 5C						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				
YCLKQA-5875 PowerPlex® 6C (eDNA)						
3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8,8
	18,18	11	16	17		
YFLPDH-5875 Investigator ESSplex SE QS KIT (GeneMapper Software 5)						
3	12,15	17,21	14,14	14,17		
		10,15	14,14	18,23		11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	
	22,26			17,22	6,7	
	18,18					
YLDV27-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8
	18	11	16	17		
YMM6T3-5870 PowerPlex® 21						
3	12,15	17,21		14,17	9,13	11,18
	8,10	10,15		18,23	9,13	11,12
	17,18	12,15.2	30,30.2		X,Y	10,12
	22,26	11,12	5,16		6,7	8,8
	18,18					
YPD7W6-5870 PowerPlex® Fusion 6C (Popstats (NIST 2017))						
3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16	17,22	6,7	8
	18	11	16	17		

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

YRF3DE-5870 GlobalFiler™ Express (DNAVIEW ver37.55)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8
	18	11			2	

ZQFLJ2-5870 GlobalFiler™

3	12,15	17,21	14,14	14,17	9,13	
	8,10	10,15	14,14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26			17,22	6,7	8,8
	18,18	11			2	

ZT8MM6-5870 PowerPlex® Fusion (Popstats)

3	12,15	17,21	14	14,17	9,13	
	8,10	10,15	14	18,23	9,13	11,12
	17,18	12,15.2	30,30.2	15,16	X,Y	10,12
	22,26	11,12	5,16		6,7	8
	18	11				

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

26EQHD-5875 GlobalFiler™ (Familias3, DNABView)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

29E3DD-5875 GlobalFiler™

4	14,16	18,19	10,11	16,19	11,12	11,12
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	20,28.2	7,8	11
	15,18	10			2	

2CXA4-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

2L2ABE-5875 VeriFiler Express (Familias)

4	14,16	18,19	10,11	16,19	11,12	11,12
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18				2	

3KN2Q7-5870 GlobalFiler™ Express (DNA View)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

3PGZ62-5870 GlobalFiler™

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

3UU2WD-5870 GlobalFiler™ (STRLAB)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10,10			2	

3V97VC-5875 GlobalFiler™ (DBLR)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

4HTX8A-5875 GlobalFiler™ Express (DBLR V1.3.35)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

63XV4B-5870 GlobalFiler™

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13,14	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

698T34-5870 GlobalFiler™ Express (DNABView)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

6AHWLA-5870 GlobalFiler™ Express (DBLR V1.3.35)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

6JHL3B-5870 GlobalFiler™						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	
6PRJ34-5870 GlobalFiler™ Express (DNABView)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	
7899LA-5870 PowerPlex® Fusion 6C (Familias v 3.3.1)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	5,10	20,28.2	7,8	11,11
	15,18	10	17	17		
79GHD8-5870 Identifiler® Plus						
4		18,19		16,19	11,12	
	8,9	14,14			11,13	9,11
	13,24	14,15	28,30.2		X,Y	12,12
	20,22				7,8	11,11
	15,18					
7CFUA8-5870 GlobalFiler™ Express (DNA•VIEW)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	
7FYP6X-5870 GlobalFiler™						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

7KUJ3Y-5870 PowerPlex® Fusion						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				
8JH69X-5870 PowerPlex® Fusion						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				
8XX7ZA-5875 PowerPlex® 5C						
4	14,16	18,19	10,11	16,19	11,12	-
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	-	7,8	11
	15,18	10	-	-	-	
8Y7EVZ-5870 GlobalFiler™						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	
9FABY7-5875 GlobalFiler™ Express						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	
9GKCL6-5870 GlobalFiler™ Express						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

9K49GV-5875 GlobalFiler™ (PopStats)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

9N4FT8-5870 PowerPlex® FUSION 6C (FBI Popstats Database)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	5,10	20,28.2	7,8	11,11
	15,18	10	17	17		

9P2RHT-5870 PowerPlex® 21

4	14,16	18,19		16,19	11,12	11,12
	8,9	14,14		16,23	11,13	9,11
	13,24	14,15	28,30.2		X,Y	12,12
	20,22	12,13	5,10		7,8	11,11
	15,18					

9ZZLL7-5875 PowerPlex® ESI 17

4	14,16	18,19	10,11	16,19		
		14,14	13,15			9,11
	13,24	14,15	28,30.2	16,16	X,Y	
	20,22			20,28.2	7,8	
	15,18					

A73WLW-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

AXP6VX-5870 GlobalFiler™ Express (DNA View)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

BNWBXR-5870 GlobalFiler™ (Popstats)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

BTBQX7-5875 PowerPlex® Fusion (GenoProof® Suite)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,13	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	10,10	20,28.2	7,8	11,11
	15,18	10	17	17		

CE7QTU-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

CGE3AV-5875 GlobalFiler™

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

DB66B3-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

DJXGDV-5870 GlobalFiler™ Express

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

DK8JZU-5870 GlobalFiler™ Express (DNA.VIEW)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

DTKEC4-5870 GlobalFiler™ Express

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

DZDGM9-5870 GlobalFiler™

4	14,16	18,19	10,11	16,19	11,12	N/A
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	N/A	N/A	20,28.2	7,8	11,11
	15,18	10	N/A	N/A	2	

E9X8FZ-5875 GlobalFiler™ Express

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

EA6NGP-5870 PowerPlex® Fusion 6C

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	20,28.2	7,8	11
	15,18	10	17	17		

F7LRLY-5875 GlobalFiler™ Express (Popstats)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	-	-	20,28.2	7,8	11,11
	15,18	10	-	-	2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

F9NRNP-5870 GlobalFiler™						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	
FJAVWP-5870 PowerPlex® Fusion 6C						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	20,28.2	7,8	11
	15,18	10	17	17		
FR2BKT-5870 PowerPlex® Fusion 5C (KIn CALc 5.0.12)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	Inconclusive				
G3HDDZ-5875 GenePrint24						
4	14,16	18,19	10,11	16,19	11,12	--
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	--	7,8	11
	15,18	10	--	--	--	
GU6JXX-5870 PowerPlex® Fusion 6C						
4	14,16	18,19	10,11	16,19	11,12	-
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	5,10	20,28.2	7,8	11,11
	15,18	10	17	17	-	
HJ2Q4X-5870 PowerPlex® Fusion						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

HMY9AP-5870 GlobalFiler™

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

HNF3CK-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

J6WQYK-5870 GlobalFiler™

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

JA9ZWV-5870 GlobalFiler™ Express

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

JEMEUM-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

JLHCGP-5870 GlobalFiler™ Express (DNA View)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

JW4FPP-5870 GlobalFiler™ Express (DNAAview)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	
KBJ2LN-5870 GlobalFiler™ Express (DNAAview)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	
KK7XKV-5870 GlobalFiler™ (CODIS)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	
L2Q8PG-5870 GlobalFiler™ Express (FBI Popstats)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	
L6A4MU-5875 PowerPlex® Fusion 5C (GeneMapper ID-X v. 1.7.2; Familias v. 3.3.1)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	5,10		7,8	11,11
	15,18	10				
L7K69T-5875 PowerPlex® Fusion System, Qiagen HDPLEX (GeneMapper ID v. 3.2.1)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	5,10	20,28.2	7,8	11,11
	15,18	10				

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

LEEB3U-5870 GlobalFiler™						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	
LPXMFT-5870 GlobalFiler™						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	
MHEHCJ-5870 PowerPlex® Fusion						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				
NTTVYT-5875 GlobalFiler™ (converge)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	
NWQE2R-5870 PowerPlex®						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	5,10	20,28.2	7,8	11,11
	15,18	10	17	17		
P6GHDC-5870 PowerPlex® 21 (Kinship (In-house software))						
4	14,16	18,19		16,19	11,12	11,12
	8,9	14,14		16,23	11,13	9,11
	13,24	14,15	28,30.2		X,Y	12,12
	20,22	12,13	5,10		7,8	11,11
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

PQW4AD-5870 GlobalFiler™ (DBLR)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

PT2RJN-5875 GlobalFiler™ Express

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

Q6DFZD-5870 PowerPlex® Fusion 6C

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	20,28.2	7,8	11
	15,18	10	17	17		

QG8WPE-5875 PowerPlex® Fusion 6C

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	20,28.2	7,8	11
	15,18	10	17	17		

QVMUUE-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

QYM7QE-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

TVVMVM-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

U6H6NL-5870 PowerPlex® Fusion 6C

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	5,10	20,28.2	7,8	11,11
	15,18	10	17	17		

U7EGE8-5870 PowerPlex® 21 (Kinship)

4	14,16	18,19		16,19	11,12	11,12
	8,9	14,14		16,23	11,13	9,11
	13,24	14,15	28,30.2		X,Y	12,12
	20,22	12,13	5,10		7,8	11,11
	15,18					

U87JHA-5870 PowerPlex® Fusion 6C

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	20,28.2	7,8	11
	15,18	10	17	17		

U922JB-5870 PowerPlex® Fusion 5C

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

UH9ZTD-5875 GlobalFiler™, MiniFiler (KinCalc)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

URWU6A-5875 GlobalFiler™ Express

4	14,16	18,19	10,11	16,19	11,12	NT
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	NT	NT	20,28.2	7,8	11
	15,18	10	NT	NT	2	

UYQYB-5875 PowerPlex® Fusion 6C

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	20,28.2	7,8	11
	15,18	10	17	17		

XLVMCB-5870 Identifiler® Direct

4		18,19		16,19	11,12	
	8,9	14,14			11,13	9,11
	13,24	14,15	28,30.2		X,Y	12,12
	20,22				7,8	11,11
	15,18					

XYHV7H-5870 PowerPlex® Fusion (Gen Analysen)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2		X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

Y4AJ3F-5875 GlobalFiler™ IQC (DNA VIEW)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

Y6QEXA-5870 ANDE (ANDE FAIRS)

4	14,16	18,19	10,11	16,19	11,12	11,12
	8,9	14	13,15	16,23	11,13	
		14,15	28,30.2	16		12
			5,10		7,8	11
	15,18					

TABLE 1

WebCode-Test	Amplification Kits (Paternity Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

Y8TFX7-5870 PowerPlex® Fusion 5C						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				
YCLKQA-5875 PowerPlex® 6C (eDNA)						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22	12,13	5,10	20,28.2	7,8	11,11
	15,18	10	17	17		
YFLPDH-5875 Investigator ESSplex SE QS KIT (GeneMapper Software 5)						
4	14,16	18,19	10,11	16,19		
		14,14	13,15	16,23		9,11
	13,24	14,15	28,30.2	16,16	X,Y	
	20,22			20,28.2	7,8	
	15,18					
YLDV27-5870 PowerPlex® Fusion 6C						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	20,28.2	7,8	11
	15,18	10	17	17		
YMM6T3-5870 PowerPlex® 21						
4	14,16	18,19		16,19	11,12	11,12
	8,9	14,14		16,23	11,13	9,11
	13,24	14,15	28,30.2		X,Y	12,12
	20,22	12,13	5,10		7,8	11,11
	15,18					
YPD7W6-5870 PowerPlex® Fusion 6C						
4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10	20,28.2	7,8	11
	15,18	10	17	17		

TABLE 1

WebCode-Test		Amplification Kits (Paternity Software)				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

YRF3DE-5870 GlobalFiler™ Express (DNAVIEW ver37.55)

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22			20,28.2	7,8	11
	15,18	10			2	

ZQFLJ2-5870 GlobalFiler™

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14,14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16,16	X,Y	12,12
	20,22			20,28.2	7,8	11,11
	15,18	10			2	

ZT8MM6-5870 PowerPlex® Fusion

4	14,16	18,19	10,11	16,19	11,12	
	8,9	14	13,15	16,23	11,13	9,11
	13,24	14,15	28,30.2	16	X,Y	12
	20,22	12,13	5,10		7,8	11
	15,18	10				

Paternity Index Results

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
Item	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 3PI - Paternity Index Results

26EQHD-5875 NIST-STRBASE

	1.8E+00	1.1E+01	4.1E+00	4.5E+00	3.5E+00	
	2.4E+00	4.7E+00	3.3E+00	2.9E+00	6.0E+00	1.6E+00
3PI	6.1E+00	6.6E+00	1.8E+00	1.6E+00		1.4E+00
	1.5E+01			2.2E+01	2.5E+00	1.9E+00
	4.6E+00					

29E3DD-5875 NIST-STRBASE

	1.9841	13.3690	4.1494	4.6904	3.5039	2.6752
	2.4988	4.8123	3.3580	2.9121	6.4433	1.5903
3PI	6.4433	7.0822	1.7699	1.5562		1.3885
	19.0114	2.1487	9.7656	35.9712	2.5786	1.9051
	4.9456					

2CXAA4-5870 NIST-STRBASE

	1.98	13.4	4.15	4.69	3.50	
	2.50	4.81	3.36		6.44	1.59
3PI	6.44	7.08	1.77	1.56		1.39
	19.0	2.15	9.77		2.58	1.91
	4.95					

2L2ABE-5875 NIST-STRBASE

	1.98	13.4	4.15	4.69	3.50	2.68
	2.50	4.81	3.36	2.91	6.44	1.59
3PI	6.44	7.08	1.77	1.56		1.39
	19.0	2.15	9.77		2.58	1.91
	4.95					

3KN2Q7-5870 NIST-STRBASE

	1.9841	13.3689	4.1493	4.6904	3.5038	
	2.4987	4.8123	3.3579	2.9120	6.4432	1.5903
3PI	6.4432	7.0822	1.7699	1.5562		1.3885
	19.0114			35.9712	2.5786	1.9051
	4.9455					

3PGZ62-5870 FBI PopStats

	2.1720	25.253	3.8110	3.6075	3.3113	
	2.2075	4.6992	3.6390	2.8458	6.1200	1.4637
3PI	5.4585	5.1813	2.1487	1.3740		1.5305
	28.902			40.323	2.8852	1.8282
	4.5914					

3UU2WD-5870 OTHER

		12.83		3.95	3.04	
	2.36	6			7.83	1.8
3PI	5.7	6.9	2.15			1.56
	14.44				2.82	1.95
	5.02					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 3PI - Paternity Index Results

4HTX8A-5875 FBI PopStats

	2.17269E+00	2.50212E+01	3.81236E+00	3.60227E+00	3.30774E+00	
	2.20932E+00	4.68987E+00	3.64040E+00	2.84793E+00	6.10533E+00	1.46521E+00
3PI	5.44825E+00	5.17319E+00	2.14966E+00	1.37615E+00		1.52993E+00
	2.84879E+01			9.82271E+01	2.88791E+00	1.83126E+00
	4.58401E+00					

63XV4B-5870 NIST-STRBASE

	1.98	13.4	4.15	4.69	3.5	
	2.5	4.81	3.36	N/A	6.45	1.59
3PI	6.45	7.08	1.77	1.56		1.39
	19			36.1	2.58	1.91
	4.95					

698T34-5870 NIST-STRBASE

	1.98	13.40	4.15	4.69	3.50	
	2.50	4.81	3.36	2.91	6.44	1.59
3PI	6.44	7.08	1.77	1.56		1.39
	19.00			36.00	2.58	1.91
	4.95					

6AHWLA-5870 FBI PopStats

	2.17450E+00	2.50714E+01	3.81775E+00	3.60891E+00	3.31364E+00	
	2.21092E+00	4.70019E+00	3.64566E+00	2.85000E+00	6.11577E+00	1.46633E+00
3PI	5.46313E+00	5.18345E+00	2.15262E+00	1.37661E+00		1.53312E+00
	2.86364E+01			9.99351E+01	2.88827E+00	1.83140E+00
	4.59705E+00					

6PRJ34-5870 NIST-STRBASE

	1.9841	13.3689	4.1493	4.6904	3.5038	
	2.4987	4.8123	3.3579	2.9120	6.4432	1.5903
3PI	6.4432	7.0821	1.7699	1.5561		1.3885
	19.0114			35.9712	2.5786	1.9051
	4.9455					

7899LA-5870 NIST-STRBASE

	1.9835	13.3704	4.1494	4.6883	3.5049	
	2.4983	4.8133	3.3581	2.9113	6.4464	1.5903
3PI	6.4593	7.0784	1.7696	1.5560		1.3885
	19.0000	2.1488	9.7568	36.1721	2.5786	1.9050
	4.9452					

79GHD8-5870 [Location Identifying Database]

		0.1833, 0.0333		0.0889, 0.1722	0.0111, 0.1111	
	0.2111, 0.2444	0.1222, 0.1167			0.0722, 0.200	0.3111, 0.3278
3PI	0.1222, 0.0500	0.1056, 0.0444	0.2778, 0.0278			0.200, 0.3611
	0.2611, 0.02222				0.2389, 0.1556	0.500, 0.500
	0.1944, 0.1944					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 3PI - Paternity Index Results

7CFUA8-5870		NIST-STRBASE					
		1.98	13.4	4.15	4.69	3.50	
		2.50	4.81	3.36	2.91	6.44	1.59
3PI		6.44	7.08	1.77	1.56		1.39
		19.0			36.0	2.58	1.91
		4.95					
7FYP6X-5870		FBI PopStats					
		2.1720	25.253	3.8110	3.6075	3.3113	
		2.2075	4.6992	3.6390	2.8458	6.1200	1.4637
3PI		5.4585	5.1813	2.1487	1.3740		1.5305
		28.902			40.323	2.8852	1.8282
		4.5914					
7KUJ3Y-5870		NIST-STRBASE					
		1.98	13.4	4.15	4.69	3.50	
		2.50	4.81	3.36		6.44	1.59
3PI		6.44	7.08	1.77	1.56		1.39
		19.0	2.15	9.77		2.58	1.91
		4.95					
8JH69X-5870		NIST-STRBASE					
		1.98	13.4	4.15	4.69	3.50	
		2.50	4.81	3.36		6.44	1.59
3PI		6.44	7.08	1.77	1.56		1.39
		19.0	2.15	9.77		2.58	1.91
		4.95					
8XX7ZA-5875		NIST-STRBASE					
		1.9841	13.3690	4.1494	4.6904	3.5039	-
		2.4988	4.8123	3.3580	2.9121	6.4433	1.5903
3PI		6.4433	7.0822	1.7699	1.5562		1.3885
		19.0114	2.1487	9.7656	-	2.5786	1.9051
		4.9456					
8Y7EVZ-5870		FBI PopStats					
		2.1720	25.253	3.8110	3.6075	3.3113	
		2.2075	4.6992	3.6390	2.8458	6.1200	1.4637
3PI		5.4585	5.1813	2.1487	1.3740		1.5305
		28.902			40.323	2.8852	1.8282
		4.5914					
9FABY7-5875		FBI PopStats					
		2.1720	25.253	3.8110	3.6075	3.3113	
		2.2075	4.6992	3.6390	2.8458	6.1200	1.4637
3PI		5.4585	5.1813	2.1487	1.3740		1.5305
		28.902				2.8852	1.8282
		4.5914					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 3PI - Paternity Index Results

9N4FT8-5870 FBI PopStats						
	2.1853	7.5075	4.4092	5.7208	3.0656	
	2.1720	3.5613	3.3807	2.3981	5.991	1.9470
3PI	5.6948	5.9880	2.0194	1.5581		1.4510
	10.163	2.9481	9.8619	34.483	1.6955	2.1450
	5.5556					
9P2RHT-5870 NIST-STRBASE						
	1.9841	13.3690		4.6904	3.5039	2.6752
	2.4988	4.8123		2.9121	6.4433	1.5903
3PI	6.4433	7.0822	1.7699			1.3558
	19.0114	2.1487	9.7656		2.5786	1.9051
	4.9456					
9ZZLL7-5875 [Location Identifying Database]						
	2.1109	14.3258	3.4228	3.9719		
		3.2469	3.2196	2.8145		1.7323
3PI	6.4720	6.3749	1.9406	1.4277		
	20.9016			70.8333	2.6898	
	4.4425					
A73WLW-5870 FBI PopStats						
	1.9841	13.369	4.1494	4.6904	3.5039	
	2.4988	4.8123	3.3580		6.4433	1.5903
3PI	6.4433	7.0822	1.7699	1.5562		1.3885
	19.011	2.1487	9.7656		2.5786	1.9051
	4.9456					
AXP6VX-5870 NIST-STRBASE						
	1.9841	13.3689	4.1493	4.6904	3.5038	
	2.4987	4.8123	3.3579	2.9120	6.4432	1.5903
3PI	6.4432	7.0821	1.7699	1.5561		1.3885
	19.0114			35.9712	2.5786	1.9051
	4.9455					
BNWBXR-5870 FBI PopStats						
	1.8169	34.722	5.3591	6.3371	5.2247	
	2.4734	4.4484	2.8241	2.9036	2.2472	1.7416
3PI	9.9602	6.9638	1.5480	1.1809		1.2745
	6.1501			41.667	1.4824	1.8018
	5.2910					
BTBQX7-5875 [Location Identifying Database] (Caucasian descent)						
	1.9835	13.3704	4.1494	4.6883	3.5049	
	2.4983	4.8133	3.3581	2.9113	6.4464	1.5903
3PI	6.4464	7.0784	1.7696	1.5560		1.3885
	19.0000	2.1488	9.7568	36.3500	2.5786	1.9050
	4.9452					

TABLE 2

WebCode-Test		Population Database(s)				
Item		D1S1656	D2S1338	D2S441	D3S1358	D5S818
		D7S820	D8S1179	D10S1248	D12S391	D13S317
		D18S51	D19S433	D21S11	D22S1045	Amelogenin
		FGA	Penta D	Penta E	SE33	TH01
		vWA				TPOX

Item 3PI - Paternity Index Results

CE7QTU-5870		NIST-STRBASE				
3PI		1.98	13.4	4.15	4.69	3.50
		2.50	4.81	3.36		6.44
		6.44	7.08	1.77	1.56	1.39
		19.0	2.15	9.77		2.58
		4.95				1.91
CGE3AV-5875		NIST-STRBASE				
3PI		1.84	10.9	3.99	4.46	3.41
		2.36	4.56	3.27	2.86	5.93
		5.94	6.44	1.72	1.57	1.41
		14.3			21.7	2.55
		omitted				
DB66B3-5870		NIST-STRBASE				
3PI		1.9841	13.3689	4.1493	4.6904	3.5038
		2.4987	4.8123	3.3579	2.9120	6.4432
		6.4432	7.0821	1.7699	1.5561	1.3885
		19.0114	2.1486	9.7656		2.5786
		4.9455				
DJXGDV-5870		NIST-STRBASE				
3PI		1.98	13.4	4.15	4.69	3.50
		2.50	4.81	3.36	2.91	6.45
		6.45	7.08	1.77	1.56	1.39
		19.00			36.10	2.58
		4.95				
DK8JZU-5870		NIST-STRBASE				
3PI		1.9841	13.3689	4.1493	4.6904	3.5038
		2.4987	4.8123	3.3579	2.9120	6.4432
		6.4432	7.0821	1.7699	1.5561	1.3885
		19.0114			35.9712	2.5786
		4.9455				
DZDGM9-5870		NIST-STRBASE				
3PI		1.98352	13.37037	4.14943	4.68831	3.50485
		2.49827	4.81333	3.35814	2.91129	6.44643
		6.44643	7.07843	1.76961	1.55603	1.38846
		19.00000			36.10000	2.57857
		4.94521				
E9X8FZ-5875		FBI PopStats				
3PI		2.1720	25.253	3.8110	3.6075	3.3113
		2.2075	4.6992	3.6390	2.8458	6.1200
		5.4585	5.1813	2.1487	1.3740	1.5305
		28.902				2.8852
		4.5914				

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

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EA6NGP-5870 FBI PopStats

	2.1720	25.253	3.8110	3.6075	3.3113	
	2.2075	4.6992	3.6390	2.8458	6.1200	1.4637
3PI	5.4585	5.1813	2.1487	1.3740		1.5305
	28.902	2.3764	11.211	40.323	2.8852	1.8282
	4.5914					

F7LRLY-5875 FBI PopStats

	2.1720	25.253	3.8110	3.6075	3.3113	
	2.2075	4.6992	3.6390	2.8458	6.1200	1.4637
3PI	5.4585	5.1813	2.1487	1.3740		1.5305
	28.902				2.8852	1.8282
	4.5914					

F9NRNP-5870 NIST-STRBASE

	2.8752	3.6765	3.7383	5.5188	2.2351	
	1.7718	2.6302	3.6193		14.881	2.4426
3PI	4.1220	4.0717	2.9481	1.9881		1.6932
	7.1225			34.247	1.2258	2.7174
	6.7069					

FJAVWP-5870 Popstats NIST 2017

	2.8752	3.6765	3.7383	5.5188	2.2351	
	1.7718	2.6302	3.6193	1.9771	14.881	2.4426
3PI	4.1220	4.0717	2.9481	1.9881		1.6932
	7.1225	4.6211	12.225	34.247	1.2258	2.7174
	6.7069					

FR2BKT-5870 NIST-STRBASE

	1.98	13.37	4.14	4.68	3.50	
	2.49	4.81	3.35	2.91	6.44	1.59
3PI	6.44	7.07	1.76	1.55		1.38
	19.00	2.14	9.75		2.57	1.90
	4.94					

G3HDDZ-5875 NIST-STRBASE

	1.984	13.370	4.149	4.688	3.505	
	2.498	4.813	3.358	2.911	6.446	1.590
3PI	6.446	7.078	1.770	1.556		1.388
	19.000	2.149	9.757		2.579	1.905
	4.945					

GU6JXX-5870 NIST-STRBASE

	1.9841	13.369	4.1494	4.6904	3.5039	-
	2.4988	4.8123	3.358	2.9121	6.4433	1.5903
3PI	6.4433	7.0822	1.7699	1.5562		1.3885
	19.0114	2.1487	9.7656	35.9712	2.5786	1.9051
	4.9456					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

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HJ2Q4X-5870	NIST-STRBASE					
	1.9841	13.3689	4.1493	4.6904	3.5038	
	2.4987	4.8123	3.3579	2.9120	6.4432	1.5903
3PI	6.4432	7.0821	1.7699	1.5561		1.3885
	19.0114	2.1486	9.7656		2.5786	1.9051
	4.9455					
HMY9AP-5870	NIST-STRBASE					
	2.1853	7.5075	4.4091	5.7208	3.0656	
	2.1720	3.5612	3.3806	-	5.5991	1.9470
3PI	5.6947	5.9880	2.0193	1.5581		1.4509
	10.1626			34.4827	1.6954	2.1450
	5.5555					
HNF3CK-5870	NIST Promega					
	1.984	13.370	4.149	4.688	3.505	
	2.498	4.813	3.358	2.911	6.446	1.590
3PI	6.446	7.078	1.770	1.556		1.388
	19.000	2.149	9.757		2.579	1.905
	4.945					
J6WQYK-5870	FBI PopStats					
	2.1720	25.253	3.8110	3.6075	3.3113	
	2.2075	4.6992	3.6390	2.8458	6.1200	1.4637
3PI	5.4585	5.1813	2.1487	1.3740		1.5305
	28.902			40.323	2.8852	1.8282
	4.5914					
JA9ZWV-5870	Popstats\POPDATA\FBI\NIST2017					
	1.9841	13.369	4.1494	4.6904	3.5039	
	2.4988	4.8123	3.3580	2.9121	6.4433	1.5903
3PI	6.4433	7.0822	1.7699	1.5562		1.3885
	19.011			35.971	2.5786	1.9051
	4.9456					
JEMEUM-5870	FBI PopStats					
	1.9841	13.369	4.1494	4.6904	3.5039	
	2.4988	4.8123	3.3580		6.4433	1.5903
3PI	6.4433	7.0822	1.7699	1.5562		1.3885
	19.011	2.1487	9.7656		2.5786	1.9051
	4.9456					
JLHCGP-5870	NIST-STRBASE					
	1.9841	13.3689	4.1493	4.6904	3.5038	
	2.4987	4.8123	3.3579	2.9120	6.4432	1.5903
3PI	6.4432	7.0821	1.7699	1.5561		1.3885
	19.0114			35.9712	2.5786	1.9051
	4.9455					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

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JW4FPP-5870		NIST-STRBASE				
		1.9841	13.3689	4.1493	4.6904	3.5038
		2.4987	4.8123	3.3579	2.9120	6.4432
3PI		6.4432	7.0821	1.7699	1.5561	1.3885
		19.0114			35.9712	2.5786
		4.9455				1.9051
KBJ2LN-5870		NIST-STRBASE				
		1.9841	13.3689	4.1493	4.6904	3.5038
		2.4987	4.8123	3.3579	2.9120	6.4432
3PI		6.4432	7.0821	1.7699	1.5561	1.3885
		19.0114			35.9712	2.5786
		4.9455				1.9051
KK7XKV-5870		FBI PopStats				
		1.9841	13.369	4.1494	4.6904	3.5039
		2.4988	4.8123	3.3580	2.9121	6.4433
3PI		6.4433	7.0822	1.7699	1.5562	1.3885
		19.011			35.971	2.5786
		4.9456				1.9051
L2Q8PG-5870		FBI PopStats				
		1.8169	34.722	5.3591	6.3371	5.2247
		2.4734	4.4484	2.8241	2.9036	2.2472
3PI		9.9602	6.9638	1.5480	1.1809	1.7416
		6.1501			41.667	1.2745
		5.2910			1.4824	1.8018
L6A4MU-5875		NIST-STRBASE				
		2.00422258	16.18807865	3.408835275	4.551274106	3.12472887
		2.286050903	4.625186229	3.197784258	2.695842303	6.171978627
3PI		7.000251555	5.840015316	2.084554951	1.379780554	1.644971491
		17.87060813	2.213767246	11.95684653		1.551426704
		4.657470545			3.043253305	1.849868787
L7K69T-5875		[Location Identifying Database]				
		2.2936	18.1159	3.0488	3.3534	3.5211
		5.0201	5.0710	2.6316	2.7472	11.1111
3PI		5.7604	4.9407	2.0467	1.5533	1.6010
		32.0513	2.1459	9.2593	55.29	1.5625
		4.5167			3.1309	1.8443
LEEB3U-5870		NIST-STRBASE				
		1.98	13.4	4.15	4.69	3.5
		2.5	4.81	3.36	N/A	6.45
3PI		6.45	7.08	1.77	1.56	1.59
		19			36.1	1.39
		4.95			2.58	1.91

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

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LPXMFT-5870		NIST-STRBASE				
3PI		1.98	13.37	4.15	4.69	3.50
		2.50	4.81	3.36	2.91	6.44
		6.44	7.08	1.77	1.56	1.39
		19.01			35.97	2.58
		4.95				1.91
MHEHCJ-5870		FBI PopStats				
3PI		1.9841	13.369	4.1494	4.6904	3.5039
		2.4988	4.8123	3.3580		6.4433
		6.4433	7.0822	1.7699	1.5562	1.3885
		19.011	2.1487	9.7656		2.5786
		4.9456				1.9051
P6GHDC-5870		NIST-STRBASE				
3PI		1.9841	13.3690		4.6904	3.5039
		2.4988	4.8123		2.9121	6.4433
		6.4433	7.0822	1.7699		1.3885
		19.0114	2.1487	9.7656		2.5786
		4.9456				1.9051
PQW4AD-5870		[Location Identifying Database]				
3PI		1.94	refer to TPOX	refer to TPOX	4.01	refer to CSF1PO
		2.23	3.74	2.96	ref to vWA	5.73
		5.67	6.48	2.01	1.27	4.83
		12.24			22.80	2.74
		16.19				62.08
Q6DFZD-5870		Popstats NIST 2017				
3PI		2.8752	3.6765	3.7383	5.5188	2.2351
		1.7718	2.6302	3.6193	1.9771	14.881
		4.1220	4.0717	2.9481	1.9881	1.6932
		7.1225	4.6211	12.225	34.247	1.2258
		6.7069				2.7174
QVMUUE-5870		FBI PopStats				
3PI		1.9841	13.369	4.1494	4.6904	3.5039
		2.4988	4.8123	3.3580		6.4433
		6.4433	7.0822	1.7699	1.5562	1.3885
		19.011	2.1487	9.7656		2.5786
		4.9456				1.9051
QYM7QE-5870		FBI PopStats				
3PI		1.9841	13.369	4.1494	4.6904	3.5039
		2.4988	4.8123	3.3580		6.4433
		6.4433	7.0822	1.7699	1.5562	1.3885
		19.011	2.1487	9.7656		2.5786
		4.9456				1.9051

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

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TVMMVM-5870 NIST-STRBASE

	1.9841	13.3689	4.1493	4.6904	3.5038	
	2.4987	4.8123	3.3579	2.9120	6.4432	1.5903
3PI	6.4432	7.0821	1.7699	1.5561		1.3885
	19.0114	2.1486	9.7656		2.5786	1.9051
	4.9455					

U6H6NL-5870 FBI PopStats, FamLinkX v.2.9.3 data base: [Continent]

	1.9841	13.369	4.1494	4.6904	3.5039	
	2.4988	4.8123	3.3580	2.9121	6.4433	1.5903
3PI	6.4433	7.0822	1.7699	1.5562		1.3885
	19.011	2.1487	9.7656	35.971	2.5786	1.9051
	4.9456					

U7EGE8-5870 NIST-STRBASE Caucasian

	1.9841	13.3690		4.6904	3.5039	2.6752
	2.4988	4.8123		2.9121	6.4433	1.5903
3PI	6.4433	7.0822	1.7699			1.3885
	19.0114	2.1487	9.7656		2.5786	1.9051
	4.9456					

U87JHA-5870 Popstats NIST 2017

	2.8752	3.6765	3.7383	5.5188	2.2351	
	1.7718	2.6302	3.6193	1.9771	14.881	2.4426
3PI	4.1220	4.0717	2.9481	1.9881		1.6932
	7.1225	4.6211	12.225	34.247	1.2258	2.7174
	6.7069					

U922JB-5870 NIST-STRBASE

	1.98	13.4	4.15	4.69	3.50	
	2.50	4.81	3.36		6.44	1.59
3PI	6.44	7.08	1.77	1.56		1.39
	19.0	2.15	9.77		2.58	1.91
	4.95					

UH9ZTD-5875 NIST-STRBASE

	1.84	10.9	3.99	4.46	3.41	
	2.36	4.56	3.27	2.86	5.93	1.60
3PI	5.94	6.44	1.72	1.57		1.41
	14.3			21.7	2.55	1.84
	omitted					

UYQYYB-5875 NIST-STRBASE

	2.8752	3.6765	3.7383	5.5188	2.2351	
	1.7718	2.6302	3.6193	1.9771	14.881	2.4426
3PI	4.1220	4.0717	2.9481	1.9881		1.6932
	7.1225	4.6211	12.225	34.247	1.2258	2.7174
	6.7069					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

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XLVMCB-5870		Applied Bio. Caucasian				
		19.3798		3.1726	3.2321	
		2.2883	5.0556		6.4599	1.6540
3PI		6.4599	6.4599	1.9833		1.5239
		18.3824			2.2957	1.8762
		4.4464				
XYHV7H-5870		NIST-STRBASE				
		1.98	13.37	4.15	4.69	3.50
		2.50	4.81	3.36	2.91	6.45
3PI		6.45	7.08	1.77		1.39
		19.00	2.15	9.76	2.58	1.91
		4.95				
Y4AJ3F-5875		Caucasian population database available in DNA View				
		3.17	6.68	2.07	2.35	1.75
		2.71	2.4	1.68	5.06	3.22
3PI		3.22	3.54	1.77	1.43	0.714
		9.5		17.98	1.29	1.91
		2.47				
Y6QEXA-5870		NIST-STRBASE				
		2.1857	7.5072	4.4085	5.7238	3.0651
		2.1719	3.5601	3.3801	2.3981	5.6
3PI		5.6923		2.0195	1.5579	1.4510
				34.5333	1.6956	2.1451
		5.5550				
Y8TFX7-5870		NIST-STRBASE				
		2.1853	7.5075	4.4092	5.7208	3.0656
		2.1720	3.5613	3.3807	2.3981	5.5991
3PI		5.6948	5.9880	2.0194	1.5581	1.4510
		10.163	2.9481	9.8619	1.6955	2.1450
YCLKQA-5875		FBI PopStats				
		1.9841	25.3807	4.1494	3.6075	3.4200
		2.2075	4.5579	3.3580	2.9121	6.5359
3PI		5.4466	4.6041	2.1542	1.5562	1.5305
		27.9330	2.5126	10.4167	35.9712	2.8852
		4.5065				
YFLPDH-5875		laboratory specific database				
		1.984	15.455	4.149	4.179	
			4.722	3.349	2.911	1.572
3PI		6.373	6.059	2.175	1.556	
		18.024			81.666	3.359
		4.766				

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

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YLDV27-5870	Popstats NIST 2017					
	2.8752	3.6765	3.7383	5.5188	2.2351	
	1.7718	2.6302	3.6193	1.9771	14.881	2.4426
3PI	4.1220	4.0717	2.9481	1.9881		1.6932
	7.1225	4.6211	12.225	34.247	1.2258	2.7174
	6.7069					
YMM6T3-5870	National Caucasian Database					
	2.0141	15.5918		4.1319	3.0017	3.0052
	2.3042	4.5697		2.9429	6.1281	1.6748
3PI	7.3578	6.735	1.9779			1.5691
	16.1859	2.3719	10.4626		2.6861	1.8594
	4.7974					
YPD7W6-5870	Popstats (NIST 2017)					
	2.8752	3.6765	3.7383	5.5188	2.2351	
	1.7718	2.6302	3.6193	1.9771	14.881	2.4426
3PI	4.1220	4.0717	2.9481	1.9881		1.6932
	7.1225	4.6211	12.225	34.247	1.2258	2.7174
	6.7069					
YRF3DE-5870	NIST-STRBASE					
	1.9841	13.3690	4.1494	4.6904	3.5039	
	2.4988	4.8123	3.3580	2.9121	6.4433	1.5903
3PI	6.4433	7.0822	1.7699	1.5562		1.3885
	19.0114			35.9712	2.5786	1.9051
	4.9456					
ZQFLJ2-5870	[Location Identifying Database]					
	2.10	11.73	3.59	4.19	3.11	
	2.35	3.88	3.02	3.41	6.21	1.75
3PI	6.14	7.14	2.10	1.25		1.58
	15.53			40.62	2.78	1.87
	5.20					
ZT8MM6-5870	NIST-STRBASE					
	1.98	13.4	4.15	4.69	3.50	
	2.50	4.81	3.36		6.44	1.59
3PI	6.44	7.08	1.77	1.56		1.39
	19.0	2.15	9.77		2.58	1.91
	4.95					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 4PI - Paternity Index Results

26EQHD-5875 NIST-STRBASE

	1.8E+00	5.5E-05	1.8E-05	4.5E-04	1.9E-04	
	1.2E+00	8.8E-04	3.3E-03	4.7E-04	1.3E-03	1.7E-03
4PI	1.3E-06	3.3E-05	8.5E-06	2.9E-04		2.7E+00
	7.2E-06			1.0E-04	2.5E+00	8.5E-07
	2.3E+00					

29E3DD-5875 NIST-STRBASE

	1.9841	0.0000	0.0000	0.0000	0.0000	0.0000
	1.2494	0.0000	0.0000	0.0000	0.0000	0.0000
4PI	0.0000	0.0000	0.0000	0.0000		2.7770
	0.0000	2.1487	0.0000	0.0000	2.5786	0.0000
	2.4728					

2L2ABE-5875 NIST-STRBASE

	1.98	0	0	0	0	0
	1.25	0	0	0	0	0
4PI	0	0	0	0		2.78
	0	2.15	0		2.58	0
	2.47					

3KN2Q7-5870 NIST-STRBASE

	1.9841	0.0010	0.0028	0.0020	0.0010	
	1.2493	0.0040	0.0028	0.0028	0.0020	0.0040
4PI	0.0030	0.0010	0.0010	0.0028		2.7770
	0.0041			0.0064	2.5786	0.0001
	2.4727					

4HTX8A-5875 FBI PopStats

	2.17274E+00	1.66794E-03	2.02221E-03	1.51175E-03	2.41358E-03	
	1.10556E+00	5.49947E-03	2.04026E-03	3.25788E-03	1.82455E-03	2.90157E-03
4PI	3.07322E-03	1.44997E-03	2.56889E-03	3.00465E-03		3.05766E+00
	8.27834E-03			1.55599E-02	2.88791E+00	1.67428E-04
	2.29622E+00					

698T34-5870 NIST-STRBASE

	1.98	0.00100	0.00280	0.00200	0.00100	
	1.25	0.00400	0.00280	0.00280	0.00200	0.00400
4PI	0.00300	0.00100	0.00100	0.00280		2.78
	0.00413			0.00641	2.58	0.000140
	2.47					

6AHWLA-5870 FBI PopStats

	2.17450E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	
	1.10546E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
4PI	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00		3.06625E+00
	0.00000E+00			0.00000E+00	2.88827E+00	0.00000E+00
	2.29852E+00					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 4PI - Paternity Index Results

6PRJ34-5870	NIST-STRBASE					
	1.9841	0.0010	0.0028	0.0020	0.0010	
	1.2493	0.0040	0.0028	0.0028	0.0020	0.0040
	0.0030	0.0010	0.0010	0.0028		2.7770
	0.0041			0.0064	2.5786	0.0001
	2.4727					
7899LA-5870	NIST-STRBASE					
	1.9835	0	0	0	0	
	1.2491	0	0	0	0	0
	0	0	0	0		2.7769
	0	2.1488	0	0	2.5786	0
	2.4726					
79GHD8-5870	[Location Identifying Database]					
		0.1278, 0.100		0.2222, 0.0111	0.3722, 0.4389	
	0.2111, 0.0778	0.1667, 0.1667			0.1889, 0.200	0.1278, 0.3111
	0.1389, 0	0.3389, 0.0944	0.1111, 0.0278			0.3611, 0.3611
	0.0944, 0.2611				0.1556, 0.1444	0.2944, 0.2944
	0.1333, 0.1944					
7CFUA8-5870	NIST-STRBASE					
	1.98	0.00100	0.00280	0.00200	0.00100	
	1.25	0.00400	0.00280	0.00280	0.00200	0.00400
	0.00300	0.00100	0.00100	0.00280		2.78
	0.00413			0.00641	2.58	0.000140
	2.47					
8XX7ZA-5875	NIST-STRBASE					
	1.9841	-	-	-	-	-
	1.2494	-	-	-	-	-
	-	-	-	-		2.7770
	-	2.1487	-	-	2.5786	-
	2.4728					
9N4FT8-5870	FBI PopStats					
	2.1853					
	1.0860					
						2.9019
		2.9481			1.6955	
	2.7778					
9P2RHT-5870	NIST-STRBASE					
	1.9841	0.0000		0.0000	0.0000	0.0000
	1.2494	0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000			2.7770
	0.0000	2.1487	0.0000		2.5786	0.0000
	2.4728					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 4PI - Paternity Index Results

AXP6VX-5870		NIST-STRBASE				
4PI	1.9841	0.0010	0.0028	0.0020	0.0010	
	1.2493	0.0040	0.0028	0.0028	0.0020	0.0040
	0.0030	0.0010	0.0010	0.0028		2.7770
	0.0041			0.0064	2.5786	0.0001
	2.4727					
BTBQX7-5875		[Location Identifying Database] (Caucasian descent)				
4PI	1.9835	0.0000	0.0000	0.0000	0.0000	
	1.2491	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000		2.7769
	0.0000	2.1488	0.0000	0.0000	2.5786	0.0000
	2.4726					
CGE3AV-5875		NIST-STRBASE				
4PI	1.84	0.000	0.000	0.000	0.000	
	1.21	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000		2.74
	0.000			0.000	2.55	0.000
	2.45					
DJXGDV-5870		NIST-STRBASE				
4PI	NA	NA	NA	NA	NA	
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA		NA
	NA			NA	NA	NA
	NA					
DK8JZU-5870		NIST-STRBASE				
4PI	1.9841	0.0010	0.0028	0.0020	0.0010	
	1.2493	0.0040	0.0028	0.0028	0.0020	0.0040
	0.0030	0.0010	0.0010	0.0028		2.7770
	0.0041			0.0064	2.5786	0.0001
	2.4727					
FR2BKT-5870		NIST-STRBASE				
4PI	1.98	0.00	0.00	0.00	0.00	
	1.24	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00		2.77
	0.00	2.14	0.00		2.57	0.00
	2.47					
G3HDDZ-5875		NIST-STRBASE				
4PI	1.842	0.000	0.728	0.000	0.702	
	1.736	3.008	0.813	3.610	0.000	2.344
	0.000	0.000	0.000	1.556		1.619
	2.028	1.074	0.000		1.289	0.000
	3.611					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 4PI - Paternity Index Results

GU6JXX-5870		NIST-STRBASE				
4PI	1.9841	0	0	0	0	-
	1.2494	0	0	0	0	0
	0	0	0	0		2.777
	0	2.1487	0	0	2.5786	0
	2.4728					
HNF3CK-5870		NIST Promega				
4PI	1.984	0.000	0.000	0.000	0.000	
	1.249	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000		2.777
	0.000	2.149	0.000		2.579	0.000
	2.473					
JLHCGP-5870		NIST-STRBASE				
4PI	1.9841	0.0012	0.0028	0.0020	0.0016	
	1.2493	0.0028	0.0028	0.0028	0.0019	0.0020
	0.0036	0.0011	0.0022	0.0028		2.7770
	0.0048			0.0064	2.5786	0.0007
	2.4727					
JW4FPP-5870		NIST-STRBASE				
4PI	1.9841	0.00100	0.00280	0.00200	0.00100	
	1.2493	0.00400	0.00280	0.00280	0.00200	0.00400
	0.00300	0.00100	0.00100	0.00280		2.7770
	0.00413			0.00640	2.5786	0.000140
	2.4727					
KBJ2LN-5870		NIST-STRBASE				
4PI	1.9841	0.0010	0.0028	0.0020	0.0010	
	1.2493	0.0040	0.0028	0.0028	0.0020	0.0040
	0.0030	0.0010	0.0010	0.0028		2.7770
	0.0041			0.0064	2.5786	0.0001
	2.4727					
KK7XKV-5870		FBI PopStats				
4PI	1.9841					
	1.2494					
						2.7770
					2.5786	
	2.7428					
L6A4MU-5875		NIST-STRBASE				
4PI	2.00422258	2.1604873812e-03	3.6526974752e-05	1.1847529239e-003	1.0360761707e-003	
	1.143300074	1.8522161432e-03	5.4577975255e-04	2.8145212840e-004	1.9227345542e-003	4.1907381220e-04
	1.7148497939e-003	4.6140595738e-04	2.4087298419e-04	6.0763815790e-004		3.102187598
	5.3041405584e-003	2.213767246	1.9015899896e-03		3.043253305	2.7751361970e-05
	2.329271594					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 4PI - Paternity Index Results

L7K69T-5875	[Location Identifying Database]					
	2.2936	0	0	0	0	
	2.5100	0	0	0	0	0
4PI	0	0	0	0		3.125
	0	2.1459	0	0	3.1309	0
	2.2584					
LPXMFT-5870	NIST-STRBASE					
	1.98	0	0	0	0	
	1.25	0	0	0	0	0
4PI	0	0	0	0		2.78
	0			0	2.58	0
	2.47					
P6GHDC-5870	NIST-STRBASE					
	1.9841	0		0	0	0
	1.2494	0		0	0	0
4PI	0	0	0			2.7770
	0	2.1487	0		2.5786	0
	2.4728					
U6H6NL-5870	FBI PopStats, FamLinkX v.2.9.3 data base: [Continent]					
	1.9841					
	1.2494					
4PI						2.7770
		2.1487			2.5786	
	2.4728					
U7EGE8-5870	NIST-STRBASE Caucasian					
	1.9841	0		0	0	0
	1.2494	0		0	0	0
4PI	0	0	0			2.7770
	0	2.1487	0		2.5786	0
	2.4728					
UH9ZTD-5875	NIST-STRBASE					
	1.84	0	0	0	0	
	1.21	0	0	0	0	0
4PI	0	0	0	0		2.74
	0			0	2.55	0
	2.45					
XLVMCB-5870	Applied Bio. Caucasian					
		0		0	0	
	1.1442	0			0	0
4PI	0	0	0			3.0479
	0				2.2957	0
	2.2232					

TABLE 2

WebCode-Test	Population Database(s)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA					

Item 4PI - Paternity Index Results

XYHV7H-5870		NIST-STRBASE				
		1.98	0.03	0.00	0.01	0.23
		1.25	0.77	0.24	0.05	0.08
4PI		0.00	0.01	0.01		2.78
		0.00	2.15	0.00	2.58	0.00
		2.47				
Y6QEXA-5870		NIST-STRBASE				
		1.7559	0	0.7348	0.0022	0
		1.5102	2.1405	0.9040	5.0784	0
4PI			0	0	1.6818	1.4510
				0	0.8478	0
		3.2454				
YCLKQA-5875		FBI PopStats				
		1.9841	0.0000	0.0000	0.0000	
		1.1038	0.0000	0.0000	0.0000	0.0000
4PI		0.0000	0.0000	0.0000	0.0000	3.0609
		0.0000	2.5126	0.0000	0.0000	2.8852
		2.2533				
YFLPDH-5875		laboratory specific database				
		1.984	0	0	0	
			0	0	0	0
4PI		0	0	0	0	
		0		0	3.359	
		2.383				
YRF3DE-5870		NIST-STRBASE				
		1.9841	0.0010	0.0028	0.0020	0.0010
		1.2494	0.0040	0.0028	0.0028	0.0020
4PI		0.0030	0.0010	0.0010	0.0028	2.7770
		0.0041			0.0064	2.5786
		2.4728				0.0001
ZQFLJ2-5870		[Location Identifying Database]				
		2.10	0.00	0.00	0.00	0.00
		1.17	0.00	0.00	0.00	0.00
4PI		0.00	0.00	0.00	0.00	3.16
		0.00			0.00	2.78
		2.60				0.00

YSTR Amplification Kit(s) & Results

TABLE 3

WebCode-Test		Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4	
Item 3 - YSTR Results										
26EQHD-5875		PowerPlex® Y 23								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
29E3DD-5875		Yfiler® Plus								
3	35,36	14	11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	
2CXXA4-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
3KN2Q7-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
3PGZ62-5870		Yfiler® Plus								
3	35,36	14	11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	
4HTX8A-5875		Yfiler® Plus								
3	35,36	14,14	11,11	13,13	30,30	25,25	11,11	13,13	13,13	
	15,15	12,12	11,11	19,19	31,31	16,16	16.2,16.2	11,11	22,22	
	37,37	12,12		16,16	17,17	22,22	23,23		12,12	
63XV4B-5870		Yfiler® Plus								
3	35,36	14	11,11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	
698T34-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
6AHWLA-5870		Yfiler® Plus								
3	35,36	14,14	11,11	13,13	30,30	25,25	11,11	13,13	13,13	
	15,15	12,12	11,11	19,19	31,31	16,16	16.2,16.2	11,11	22,22	
	37,37	12,12		16,16	17,17	22,22	23,23		12,12	

TABLE 3

WebCode-Test		Amplification Kit								
Item		DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
		DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
Item 3 - YSTR Results										
6PRJ34-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
7899LA-5870		Investigator Argus Y-28 QS								
3		14	11,11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12	13	16	17	22	23	10	12	
7CFUA8-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
7FYP6X-5870		Yfiler® Plus								
3	35,36	14	11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	
8JH69X-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
8Y7EVZ-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
9N4FT8-5870		PowerPlex® Y 23								
3		14	11,11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
9ZZLL7-5875										
3		14	11,11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
AXP6VX-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
BNWBXR-5870		Yfiler® Plus								
3	35,36	14	11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	

TABLE 3

WebCode-Test		Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4	
Item 3 - YSTR Results										
BTBQX7-5875		PowerPlex® Y 23								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
CE7QTU-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
DJXGDV-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
DK8JZU-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
DTKEC4-5870		PowerPlex® Y 23								
3		14	11,11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
GU6JXX-5870		PowerPlex® Y 23								
3	-	14	11,11	13	30	25	11	13	13	
	15	12	11	19	-	16	16.2	-	22	
	-	12	13	16	17	-	23	10	12	
HNF3CK-5870		PowerPlex® Y 23								
3		14	11,11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
J6WQYK-5870		Yfiler® Plus								
3	35,36	14	11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	
JA9ZVV-5870		PowerPlex® Y 23								
3		14	11,11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
JLHCGP-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	

TABLE 3

WebCode-Test		Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4	
Item 3 - YSTR Results										
JW4FPP-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
KBJ2LN-5870		Yfiler®								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2			
							23		12	
KK7XKV-5870		Yfiler®								
3	35,36	14	11,11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	
L2Q8PG-5870		Yfiler® Plus								
3	35,36	14	11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	
L6A4MU-5875		PowerPlex® Y 23								
3		14	11,11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
L7K69T-5875		PowerPlex® Y 23								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
LEEB3U-5870		Yfiler® Plus								
3	35,36	14	11,11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	
LPXMFT-5870		PowerPlex® Y 23								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
U6H6NL-5870		PowerPlex® Y 23								
3		14	11	13	30	25	11	13	13	
	15	12	11	19		16	16.2		22	
		12	13	16	17		23	10	12	
XLVMCB-5870		Yfiler® Plus								
3	35,36	14	11,11	13	30	25	11	13	13	
	15	12	11	19	31	16	16.2	11	22	
	37	12		16	17	22	23		12	

TABLE 3

WebCode-Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4

Item 3 - YSTR Results

YCLKQA-5875		PowerPlex® Y 23							
3		14	11	13	30	25	11	13	13
	15	12	11	19		16	16.2		22
		12	13	16	17		23	10	12
YRF3DE-5870		Yfiler®							
3		14	11	13	30	25	11	13	13
	15	12	11	19		16	16.2		
							23		12
ZT8MM6-5870		Yfiler®							
3		14	11	13	30	25	11	13	13
	15	12	11	19		16	16.2		
							23		12

TABLE 3

WebCode-Test		Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4	
Item 4 - YSTR Results										
26EQHD-5875		PowerPlex® Y 23								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16		25	
		11	12	17	17		21	12	11	
29E3DD-5875		Yfiler® Plus								
4	38,39	15	17,19	13	30	21	10	11	14	
	14	11	13	22	31	17	16	10	25	
	40	11		17	17	16	21		11	
2CXXA4-5870		Yfiler®								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16			
							21		11	
3KN2Q7-5870		Yfiler®								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16			
							21		11	
3PGZ62-5870		Yfiler® Plus								
4	38,39	15	17,19	13	30	21	10	11	14	
	14	11	13	22	31	17	16	10	25	
	40	11		17	17	16	21		11	
4HTX8A-5875		Yfiler® Plus								
4	38,39	15,15	17,19	13,13	30,30	21,21	10,10	11,11	14,14	
	14,14	11,11	13,13	22,22	31,31	17,17	16,16	10,10	25,25	
	40,40	11,11		17,17	17,17	16,16	21,21		11,11	
63XV4B-5870		Yfiler® Plus								
4	38,39	15	17,19	13	30	21	10	11	14	
	14	11	13	22	31	17	16	10	25	
	40	11		17	17	16	21		11	
698T34-5870		Yfiler®								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16			
							21		11	
6AHWLA-5870		Yfiler® Plus								
4	38,39	15,15	17,19	13,13	30,30	21,21	10,10	11,11	14,14	
	14,14	11,11	13,13	22,22	31,31	17,17	16,16	10,10	25,25	
	40,40	11,11		17,17	17,17	16,16	21,21		11,11	
6PRJ34-5870		Yfiler®								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16			
							21		11	

TABLE 3

WebCode-Test		Amplification Kit								
Item		DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
		DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
Item 4 - YSTR Results										
7899LA-5870		Investigator Argus Y-28 QS								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22	31	17	16	10	25	
	40	11	12	17	17	16	21	12	11	
7CFUA8-5870		Yfiler®								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16			
							21		11	
7FYP6X-5870		Yfiler® Plus								
4	38,39	15	17,19	13	30	21	10	11	14	
	14	11	13	22	31	17	16	10	25	
	40	11		17	17	16	21		11	
8JH69X-5870		Yfiler®								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16			
							21		11	
9N4FT8-5870		PowerPlex® Y 23								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16		25	
		11	12	17	17		21	12	11	
9ZZLL7-5875										
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16		25	
		11	12	17	17		21	12	11	
AXP6VX-5870		Yfiler®								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16			
							21		11	
BNWBXR-5870		Yfiler® Plus								
4	38,39	15	17,19	13	30	21	10	11	14	
	14	11	13	22	31	17	16	10	25	
	40	11		17	17	16	21		11	
BTBQX7-5875		PowerPlex® Y 23								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16		25	
		11	12	17	17		21	12	11	
CE7QTU-5870		Yfiler®								
4		15	17,19	13	30	21	10	11	14	
	14	11	13	22		17	16			
							21		11	

TABLE 3

WebCode-Test		Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4	
Item 4 - YSTR Results										
DJXGDV-5870		Yfiler®								
		15	17,19	13	30	21	10	11	14	
4	14	11	13	22		17	16			
							21		11	
DK8JZU-5870		Yfiler®								
		15	17,19	13	30	21	10	11	14	
4	14	11	13	22		17	16			
							21		11	
DTKEC4-5870		PowerPlex® Y 23								
		15	17,19	13	30	21	10	11	14	
4	14	11	13	22		17	16		25	
		11	12	17	17		21	12	11	
GU6JXX-5870		PowerPlex® Y 23								
	-	15	17,19	13	30	21	10	11	14	
4	14	11	13	22	-	17	16	-	25	
	-	11	12	17	17	-	21	12	11	
HNF3CK-5870		PowerPlex® Y 23								
		15	17,19	13	30	21	10	11	14	
4	14	11	13	22		17	16		25	
		11	12	17	17		21	12	11	
J6WQYK-5870		Yfiler® Plus								
	38,39	15	17,19	13	30	21	10	11	14	
4	14	11	13	22	31	17	16	10	25	
	40	11		17	17	16	21		11	
JA9ZWV-5870		PowerPlex® Y 23								
		15	17,19	13	30	21	10	11	14	
4	14	11	13	22		17	16		25	
		11	12	17	17		21	12	11	
JLHCGP-5870		Yfiler®								
		15	17,19	13	30	21	10	11	14	
4	14	11	13	22		17	16			
							21		11	
JW4FPP-5870		Yfiler®								
		15	17,19	13	30	21	10	11	14	
4	14	11	13	22		17	16			
							21		11	
KBJ2LN-5870		Yfiler®								
		15	17,19	13	30	21	10	11	14	
4	14	11	13	22		17	16			
							21		11	

TABLE 3

WebCode-Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4

Item 4 - YSTR Results

KK7XKV-5870									
	38,39	15	17,19	13	30	21	10	11	14
4	14	11	13	22	31	17	16	10	25
	40	11		17	17	16	21		11
L2Q8PG-5870 Yfiler® Plus									
	38,39	15	17,19	13	30	21	10	11	14
4	14	11	13	22	31	17	16	10	25
	40	11		17	17	16	21		11
L6A4MU-5875 PowerPlex® Y 23									
		15	17,19	13	30	21	10	11	14
4	14	11	13	22		17	16		25
		11	12	17	17		21	12	11
L7K69T-5875 PowerPlex® Y 23									
		15	17,19	13	30	21	10	11	14
4	14	11	13	22		17	16		25
		11	12	17	17		21	12	11
LEEB3U-5870 Yfiler® Plus									
	38,39	15	17,19	13	30	21	10	11	14
4	14	11	13	22	31	17	16	10	25
	40	11		17	17	16	21		11
LPXMFT-5870 PowerPlex® Y 23									
		15	17,19	13	30	21	10	11	14
4	14	11	13	22		17	16		25
		11	12	17	17		21	12	11
U6H6NL-5870 Yfiler®, PowerPlex® Y 23									
		15	17,19	13	30	21	10	11	14
4	14	11	13	22		17	16		25
		11	12	17	17		21	12	11
XLVMCB-5870 Yfiler® Plus									
	38,39	15	17,19	13	30	21	10	11	14
4	14	11	13	22	31	17	16	10	25
	40	11		17	17	16	21		11
YCLKQA-5875 PowerPlex® Y 23									
		15	17,19	13	30	21	10	11	14
4	14	11	13	22		17	16		25
		11	12	17	17		21	12	11
YRF3DE-5870 Yfiler®									
		15	17,19	13	30	21	10	11	14
4	14	11	13	22		17	16		
							21		11

TABLE 3

WebCode-Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4

Item 4 - YSTR Results

ZT8MM6-5870	Yfiler®								
		15	17,19	13	30	21	10	11	14
4	14	11	13	22		17	16		
							21		11

Additional DNA & PI Results

TABLE 4

Locus	WebCode-Test	Item 1	Item 2	Item 3	Item 3 PI	Item 4	Item 4 PI
D10S2325	L7K69T-5875	14,15	13,15	8,13	3.7594	10,13	3.7594
D21S2055	L7K69T-5875	29,34	32,34	32,34	19.2308	18.1,27	0
D2S1360	L7K69T-5875	20,21	21,22	22,25	1.6181	22,26	1.6181
D3S1744	L7K69T-5875	18,18	14,18	14,17	4.8077	17,19	0
D4S2366	L7K69T-5875	10,10	9,10	9,9	2.8818	9,9	2.8818
D5S2500	L7K69T-5875	10,15	15,15	11,15	2.3474	9,15	2.3474
D6S474	L7K69T-5875	13,15	13,15	14,15	1.25	13,16	1.25
D7S1517	L7K69T-5875	19,20	19,26	25,26	9.2596	25,25	0
D8S1132	L7K69T-5875	19,24	19,24	17,19	2.3923	21,21	0
DXS10074	9N4FT8-5870	16,18	16,16	16		20	
	U6H6NL-5870	16,18	16,16	16	5.526	20	-1
DXS10079	9N4FT8-5870	17,20	17,20	20		18	
	U6H6NL-5870	17,20	17,20	20	3.557	18	-1
DXS10101	9N4FT8-5870	30,31	28,30	28		32	
	U6H6NL-5870	30,31	28,30	28	18.93	32	-1
DXS10103	9N4FT8-5870	16,19	16,19	19		18	
	U6H6NL-5870	16,19	16,19	19	1.883	18	-1
DXS10134	9N4FT8-5870	36,37	37,37	37		35	
	U6H6NL-5870	36,37	37,37	37	6.439	35	-1
DXS10135	9N4FT8-5870	23,24	23,24	24		27	
	U6H6NL-5870	23,24	23,24	24	7.137	27	-1
DXS10146	9N4FT8-5870	29,47.2	45.2,47.2	45.2		31	
	U6H6NL-5870	29,47.2	45.2,47.2	45.2	59.76	31	-1
DXS10148	9N4FT8-5870	25.1,25.1	24.1,25.1	24.1		29.1	
	U6H6NL-5870	25.1,25.1	24.1,25.1	24.1	6.902	29.1	0
DXS21S11	9N4FT8-5870	29,30	30,30	30,30.2		28,30.2	
DXS7132	9N4FT8-5870	13,14	13,14	13		14	
	U6H6NL-5870	13,14	13,14	13	1.536	14	-1
DXS7423	9N4FT8-5870	13,14	13,15	15		15	
	U6H6NL-5870	13,14	13,15	15	0.2632	15	-1
DXS8378	9N4FT8-5870	10,11	10,12	12		10	
	U6H6NL-5870	10,11	10,12	12	5.369	10	-1

TABLE 4

Locus	WebCode-Test	Item 1	Item 2	Item 3	Item 3 PI	Item 4	Item 4 PI
HPRTB	9N4FT8-5870	12,13	12,12	12		14	
	U6H6NL-5870	12,13	12,12	12	2.295	14	-1
QS1	YFLPDH-5875	Q,Q	Q,Q	Q,Q		Q,Q	
QS2	YFLPDH-5875	S,S	S,S	S,S		S,S	
VWA	79GHD8-5870			18,18			

Paternity DNA Statistics & Conclusions

TABLE 5

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
26EQHD-5875	Item 3 - Alleged Father A	1400000000000	99.9999	NIST-STRBASE
29E3DD-5875	Item 3 - Alleged Father A	354754073579972.0000	99.9999	NIST-STRBASE
2CXA4-5870	Item 3 - Alleged Father A	1,200,000,000,000	99.9999	NIST-STRBASE
2L2ABE-5875	Item 3 - Alleged Father A	9874003661000	99.999999999999	NIST-STRBASE
3KN2Q7-5870	Item 3 - Alleged Father A	6320000000000	99.9999	NIST-STRBASE
3PGZ62-5870	Item 3 - Alleged Father A	8667000000000	99.999999999999	FBI PopStats
3UU2WD-5870	Item 3 - Alleged Father A	1600000000	99.99	OTHER
3V97VC-5875	Item 3 - Alleged Father A			Laboratory Specific Database
4HTX8A-5875	Item 3 - Alleged Father A	20535405909960	99.9999999999951	FBI PopStats
63XV4B-5870	Item 3 - Alleged Father A	2180000000000		NIST-STRBASE
698T34-5870	Item 3 - Alleged Father A	6320000000000	99.9999	NIST-STRBASE
6AHWLA-5870	Item 3 - Alleged Father A	21576000000000	99.9999999999954	FBI PopStats
6JHL3B-5870	Item 3 - Alleged Father A	1,6000000000	99.99	other
6PRJ34-5870	Item 3 - Alleged Father A	6320000000000	99.9999	NIST-STRBASE
7899LA-5870	Item 3 - Alleged Father A	133343293400000	99.99999999	NIST-STRBASE
79GHD8-5870	Item 3 - Alleged Father A	893573148.13	99.99999989	[Location Identifying Database]
7CFUA8-5870	Item 3 - Alleged Father A	6320000000000	99.9999	NIST-STRBASE
7FYP6X-5870	Item 3 - Alleged Father A	8667000000000	99.9999999999	FBI PopStats
7KUJ3Y-5870	Item 3 - Alleged Father A	1,200,000,000,000	99.9999	NIST-STRBASE
8JH69X-5870	Item 3 - Alleged Father A	1,200,000,000,000	99.9999	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
8XX7ZA-5875	Item 3 - Alleged Father A	3686476621177	99.99999999997	NIST-STRBASE
8Y7EVZ-5870	Item 3 - Alleged Father A	8667000000000	99.9999999999	FBI PopStats
9FABY7-5875	Item 3 - Alleged Father A	214900000000	99.9999999995347	FBI PopStats
9GKCL6-5870	Item 3 - Alleged Father A			
9K49GV-5875	Item 3 - Alleged Father A	956,100,000,000	99.999999999895	FBI PopStats
9N4FT8-5870	Item 3 - Alleged Father A	27800000000000	99.9999999999	FBI PopStats
9P2RHT-5870	Item 3 - Alleged Father A	454800000000		NIST-STRBASE
9ZZLL7-5875	Item 3 - Alleged Father A	68000000000	99.999	[Location Identifying Database]
A73WLW-5870	Item 3 - Alleged Father A	1266000000000	99.9999999999	FBI PopStats
AXP6VX-5870	Item 3 - Alleged Father A	6320000000000	99.9999	NIST-STRBASE
BNWBXR-5870	Item 3 - Alleged Father A	700,000,000,000		FBI PopStats
BTBQX7-5875	Item 3 - Alleged Father A	133730000000000	99.9999999999	[Location Identifying Database] (Caucasian descent)
CE7QTU-5870	Item 3 - Alleged Father A	1200000000000	99.9999	NIST-STRBASE
CGE3AV-5875	Item 3 - Alleged Father A	250000000000		NIST-STRBASE
DB66B3-5870	Item 3 - Alleged Father A	3680000000000	99.9	NIST-STRBASE
DJXGDV-5870	Item 3 - Alleged Father A	6334800000000	99.9999	NIST-STRBASE
DK8JZU-5870	Item 3 - Alleged Father A	6320000000000	99.9999	NIST-STRBASE
DTKEC4-5870	Item 3 - Alleged Father A			
DZDGM9-5870	Item 3 - Alleged Father A	6334791522163.04	99.9999	NIST-STRBASE
E9X8FZ-5875	Item 3 - Alleged Father A	214900000000	99.9999999995347	FBI PopStats
EA6NGP-5870	Item 3 - Alleged Father A	230,090,000,000,000	99.9999999999	FBI PopStats

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
F7LRLY-5875	Item 3 - Alleged Father A	214900000000	99.99999999534	FBI PopStats
F9NRNP-5870	Item 3 - Alleged Father A	271,200,000,000	99.99999999631	NIST-STRBASE
FJAVWP-5870	Item 3 - Alleged Father A	30,300,000,000,000	99.99	Popstats NIST 2017
FR2BKT-5870	Item 3 - Alleged Father A	370000000000	99.9	NIST-STRBASE
G3HDDZ-5875	Item 3 - Alleged Father A	3678989284911	99.9999999997	NIST-STRBASE
GU6JXX-5870	Item 3 - Alleged Father A	132607072704193.00	99.999999999992	NIST-STRBASE
HJ2Q4X-5870	Item 3 - Alleged Father A	368000000000	99.9	NIST-STRBASE
HMY9AP-5870	Item 3 - Alleged Father A	390000000000	99.9999	NIST-STRBASE
HNF3CK-5870	Item 3 - Alleged Father A	1263697000000	99.99999999	NIST Promega
J6WQYK-5870	Item 3 - Alleged Father A	860000000000	99.9999999999	FBI PopStats
JA9ZWV-5870	Item 3 - Alleged Father A	632000000000	99.9999999999	Popstats\POPDATA\FBI\NIST2017
JEMEUM-5870	Item 3 - Alleged Father A	126600000000	99.9999999999	FBI PopStats
JLHCGP-5870	Item 3 - Alleged Father A	632000000000	99.9999	NIST-STRBASE
JW4FPP-5870	Item 3 - Alleged Father A	632000000000	99.9999	NIST-STRBASE
KBJ2LN-5870	Item 3 - Alleged Father A	632000000000	99.9999	NIST-STRBASE
KK7XKV-5870	Item 3 - Alleged Father A	632000000000	99.9999999999	FBI PopStats
L2Q8PG-5870	Item 3 - Alleged Father A	400000000000		FBI PopStats
L6A4MU-5875	Item 3 - Alleged Father A	3293316795000	99,9999	NIST-STRBASE
L7K69T-5875	Item 3 - Alleged Father A	66983353646254700000	99,9999	[Location Identifying Database]
LEEB3U-5870	Item 3 - Alleged Father A	218000000000		NIST-STRBASE
LPXMFT-5870	Item 3 - Alleged Father A	6319649959581	99.99	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
MHEHCJ-5870	Item 3 - Alleged Father A	1,266,000,000,000	99.9999999999	FBI PopStats
NTTVYT-5875	Item 3 - Alleged Father A			GlobalFiler
NWQE2R-5870	Item 3 - Alleged Father A			
P6GHDC-5870	Item 3 - Alleged Father A	454800000000	99.999	NIST-STRBASE
PQW4AD-5870	Item 3 - Alleged Father A	670846000000		[Location Identifying Database]
PT2RJN-5875	Item 3 - Alleged Father A			
Q6DFZD-5870	Item 3 - Alleged Father A	30,300,000,000,000	99.99	Popstats NIST 2017
QG8WPE-5875	Item 3 - Alleged Father A	27800000000000	99.99	NIST-STRBASE
QVMUUE-5870	Item 3 - Alleged Father A	1266000000000	99.9999999999	FBI PopStats
QYM7QE-5870	Item 3 - Alleged Father A	1266000000000	99.9999999999	FBI PopStats
TVMMVM-5870	Item 3 - Alleged Father A	3680000000000	99.9	NIST-STRBASE
U6H6NL-5870	Item 3 - Alleged Father A	8775468000000000000000 0.00	99.999999999999999999 98	FBI PopStats, FamLinkX v.2.9.3 data base: [Continent]
U7EGE8-5870	Item 3 - Alleged Father A	454800000000	99.999	NIST-STRBASE Caucasian
U87JHA-5870	Item 3 - Alleged Father A	30,300,000,000,000	99.99	Popstats NIST 2017
U922JB-5870	Item 3 - Alleged Father A	1200000000000	99.9999	NIST-STRBASE
UH9ZTD-5875	Item 3 - Alleged Father A	250,000,000,000		NIST-STRBASE
URWU6A-5875	Item 3 - Alleged Father A			FBI PopStats
UYQYYB-5875	Item 3 - Alleged Father A	30000000000000		NIST-STRBASE
XLVMCB-5870	Item 3 - Alleged Father A	1090718360	99.99999991	Applied Bio. Caucasian
XYHV7H-5870	Item 3 - Alleged Father A	504304483434.409	99.99	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
Y4AJ3F-5875	Item 3 - Alleged Father A	1042600000	99.99999999	Caucasian population database available in DNA View
Y6QEXA-5870	Item 3 - Alleged Father A	19779279305	99.99	NIST-STRBASE
Y8TFX7-5870	Item 3 - Alleged Father A	145100000000		NIST-STRBASE
YCLKQA-5875	Item 3 - Alleged Father A	197055958439318.0000	99.9999	FBI PopStats
YFLPDH-5875	Item 3 - Alleged Father A	118482480299	99.99999999	laboratory specific database
YLDV27-5870	Item 3 - Alleged Father A	30,300,000,000,000	99.99	Popstats NIST 2017
YMM6T3-5870	Item 3 - Alleged Father A	550000000000	99.9999	National Caucasian Database
YPD7W6-5870	Item 3 - Alleged Father A	30,300,000,000,000	99.99	Popstats (NIST 2017)
YRF3DE-5870	Item 3 - Alleged Father A	6320000000000	99.9999	NIST-STRBASE
ZQFLJ2-5870	Item 3 - Alleged Father A	3633947395422		[Location Identifying Database]
ZT8MM6-5870	Item 3 - Alleged Father A	1,200,000,000,000	99.9999	NIST-STRBASE

Paternity DNA Statistics Response Summary		Participants: 93
<i>Which of the alleged fathers cannot be excluded as the biological parent of Item 2?</i>		
Responses	Item 3 - Alleged Father A	93
	Item 4 - Alleged Father B	0
	Inconclusive	0
	No Response	0

Kinship Likelihood Ratio Results

TABLE 6

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D1S1656	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXXA4-5870	$pq/2/2pq$	$p=17 \ q=17.3$	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	$p=17 \ q=17.3 \ r=14 \ s=14$	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(p^2/4)/p^2$	$p = 14$	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	$1/(4)$	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=17 \ q=17.3$	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(ab)/(ab)$	$a=17 \ b=17.3$	0.25000
	JA9ZWV-5870	$(C^2)(1/4)/C^2$	C: 14	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D1S1656	KK7XKV-5870	1/4		0.25
	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=17 q=17.3 r=14	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2bc(k0)/2bc	b=17 c=17.3	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500
Statistical Analysis Summary of D1S1656			Likelihood Ratio Mode:	0.2500

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S1338	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXA4-5870	$rs/2/2rs$	$r=16 \ s=23$	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	$p=17 \ q=18 \ r=16 \ s=23$	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(2pq/4)/2pq$	$p = 16 \ q = 23$	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=17 \ q=18$	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(ab)/(ab)$	$a=17 \ b=18$	0.25000
	JA9ZWV-5870	$(2CD)(1/4)/2CD$	C: 16 D: 23	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S1338	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=17 q=18 r=16 s=23	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2cd(ko)/2cd	c=16 d=23	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of D2S1338

Likelihood Ratio Mode: 0.2500

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S441	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXXA4-5870	$qr/2/2qr$	q=11 r=15	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	p=10 q=11 r=15	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(2qr/4)/2qr$	q = 11 r = 15	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(1 + 4p)/8p$	p=10	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(aa)/(aa)$	a=10	0.25000
	JA9ZWV-5870	$(2BC)(1/4)/2BC$	B: 11 C: 15	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S441	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=10 q=11 r=15	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2bc(k0)/2bc	b=11 c=15	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of D2S441

Likelihood Ratio Mode: 0.2500

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D3S1358	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXA4-5870	$rs/2/2rs$	$r=14 \ s=17$	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	$p=16 \ q=18 \ r=14 \ s=17$	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(2pq/4)/2pq$	$p = 14 \ q = 17$	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=16 \ q=18$	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(ab)/(ab)$	$a=16 \ b=18$	0.25000
	JA9ZWV-5870	$(2CD)(1/4)/2CD$	C: 14 D: 17	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D3S1358	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=16 q=18 r=14 s=17	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2cd(ko)/2cd	c=14 d=17	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of D3S1358

Likelihood Ratio Mode: 0.2500

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D5S818	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXXA4-5870	$q^2/4/q^2$	q=12	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	p=11 q=12	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(q^2/4)/q^2$	q = 12	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(1 + 4p)/8p$	p=11	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(aa)/(aa)$	a=11	0.25000
	JA9ZWV-5870	$(B^2)(1/4)/B^2$	B: 12	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D5S818	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=11 q=12	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	$b*b(k0)/b*b$	b=12	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of D5S818

Likelihood Ratio Mode: 0.2500

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D7S820	26EQHD-5875	$1 + 2p/8p$	$p = 11$	0.86
	29E3DD-5875	$(1 + 2p)/8p$	$p = 11$	0.8598
	2CXXA4-5870	$(1 + 2p)/8p$	$p = 11$	0.8598
	2L2ABE-5875	$(1 + 2a)/8a$	$a = 11$	0.8598
	3KN2Q7-5870	$(1 + 2r)/8r$	$r = 11$	0.8597
	3PGZ62-5870	$(0.25a + 0.5ac)/2ac$	$a = 10 \quad c = 11$	0.85976
	3V97VC-5875	$(1 + 2a)/8a$	$a = 11$	0.8597
	4HTX8A-5875	$1 + 2P/8*P$	$P = 11$	0.859756098
	698T34-5870	$(1 + 2p)/8p$	$p = 11$	0.8598
	6AHWLA-5870	$(1 + 2p)/8p$	$p = 11$	0.859756098
	6PRJ34-5870	$(1 + 2r)/8r$	$r = 11$	0.8597
	7899LA-5870	$(1 + 2P_i)/8P_i$	11	0.8598
	79GHD8-5870	$(1 + 2p)/8p$	$p = 11 \quad q = 10$	0.8598
	7CFUA8-5870	$(1 + 2p)/8p$	$p = 11$	0.8598
	7FYP6X-5870	$(1 + 2q)/8q$	$q = 11$	0.8598
	7KUJ3Y-5870	$(1 + 2p)/8p$	$p = 11$	0.8598
	8JH69X-5870	$(1 + 2p)/8p$	$p = 11$	0.8598
	8XX7ZA-5875	$(1 + 2*R8)/(8*R8)$	$11: 0.2050$	0.8598
	9N4FT8-5870	$(1 + 2p)/8p$	$p = 11$	0.8597
	9ZZLL7-5875			1.1631
	AXP6VX-5870	$(1 + 2r)/8r$	$r = 11$	0.8597
	BTBQX7-5875	$(p + q + 4pq)/8pq$	$p = 10 \quad q = 11$	1.1631
	CE7QTU-5870	$(1 + 2p)/8p$	$p = 11$	0.8598
	CGE3AV-5875			0.8491
	DJXGDV-5870	$(1 + 2r)/8r$	$r = 11$	0.8598
	DK8JZU-5870	$(1 + 2r)/8r$	$r = 11$	0.8597
	GU6JXX-5870	$(1 + 2*P[11])/(8*P[11])$	$P[11]$	0.8598
	HMY9AP-5870	$(1 + 2p)/8p$	$p = 11$	0.8598
	HNF3CK-5870	$(1 + 2p)/8p$	$p = 11$	0.8598
	J6WQYK-5870	$(0.25a + 0.5ac)/2ac$	$a = 10 \quad c = 11$	0.85976
	JA9ZWV-5870	$[(C/2)(1/2)] + [(2BC)(1/4)]/2BC$	$B: 11 \quad C: 9$	0.8598
	JLHCGP-5870	$(1 + 2r)/8r$	$r = 11$	0.8597
	JW4FPP-5870	$(1 + 2p)/8p$	$p = 11$	0.8597
	KBJ2LN-5870	$(1 + 2r)/8r$	$r = 11$	0.8597
	KK7XKV-5870	$1 + 2P/8P$	11	0.8597

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D7S820	L6A4MU-5875	$(1+2b)/8b$	b=11	0.8598
	L7K69T-5875	$(1+2p)/8p$	p=11	0.8598
	LPXMFT-5870	$(1+2a)/8a$	A=11	0.8598
	U6H6NL-5870	$(1+2P)/8P$	P=11	0.8598
	U922JB-5870	$(1+2q)/8q$	q=11	0.8598
	UH9ZTD-5875	*	*	0.8491
	Y4AJ3F-5875	$c(k1)+2ac(k0)/2ac$	a=11 c=9	0.859756
	YCLKQA-5875	$(1+2q)/8q$	q=0.205	0.8598
	YMM6T3-5870	$(1+2p)/8p$	P=0.205	0.8597
	YRF3DE-5870	$(1+2s)/8s$	s = 11	0.8598
	ZT8MM6-5870	$(1+2p)/8p$	p=11	0.8598

Statistical Analysis Summary of D7S820

Likelihood Ratio Mode: 0.8598

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D8S1179	26EQHD-5875	$1 + 2p/8p$	$p = 13$	0.63
	29E3DD-5875	$(1 + 2p)/8p$	$p = 13$	0.6292
	2CXA4-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	2L2ABE-5875	$(1 + 2a)/8a$	$a = 13$	0.6292
	3KN2Q7-5870	$(1 + 2q)/8q$	$q = 13$	0.6292
	3PGZ62-5870	$(0.25b + 0.5ab)/2ab$	$a = 13 \ b = 15$	0.62925
	3V97VC-5875	$(1 + 2a)/8a$	$a = 13$	0.6292
	4HTX8A-5875	$1 + 2P/8 \cdot P$	$P = 13$	0.629247573
	698T34-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	6AHWLA-5870	$(1 + 2p)/8p$	$p = 13$	0.629247573
	6PRJ34-5870	$(1 + 2q)/8q$	$q = 13$	0.6292
	7899LA-5870	$(1 + 2P_i)/8P_i$	13	0.6292
	79GHD8-5870	$(1 + 2p)/8p$	$p = 13 \ q = 15 \ r = 12$	4.0425
	7CFUA8-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	7FYP6X-5870	$(1 + 2q)/8q$	$q = 13$	0.6293
	7KUJ3Y-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	8JH69X-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	8XX7ZA-5875	$(1 + 2 \cdot Q9)/(8 \cdot Q9)$	13: 0.3296	0.6292
	9N4FT8-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	9ZZLL7-5875			1.5893
	AXP6VX-5870	$(1 + 2q)/8q$	$q = 13$	0.6292
	BTBQX7-5875	$(1 + 4p)/8p$	$p = 13$	1.5893
	CE7QTU-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	CGE3AV-5875			0.6294
	DJXGDV-5870	$(1 + 2q)/8q$	$q = 13$	0.6292
	DK8JZU-5870	$(1 + 2q)/8q$	$q = 13$	0.6292
	GU6JXX-5870	$(1 + 2 \cdot P[13])/(8 \cdot P[13])$	$P[13]$	0.6292
	HMY9AP-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	HNF3CK-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	J6WQYK-5870	$(0.25b + 0.5ab)/2ab$	$a = 13 \ b = 15$	0.62925
	JA9ZWV-5870	$[(C/2)(1/2)] + [(2AC)(1/4)]/2AC$	A: 13 C: 12	0.6292
	JLHCGP-5870	$(1 + 2q)/8q$	$q = 13$	0.6292
	JW4FPP-5870	$(1 + 2p)/8p$	$p = 13$	0.6292
	KBJ2LN-5870	$(1 + 2q)/8q$	$q = 13$	0.6292
	KK7XKV-5870	$1 + 2P/8P$	13	0.6292

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D8S1179	L6A4MU-5875	$(1+2a)/8a$	$a=13$	0.6292
	L7K69T-5875	$(1+2p)/8p$	$p=13$	0.6292
	LPXMFT-5870	$(1+2a)/8a$	$A=13$	0.6292
	U6H6NL-5870	$(1+2P)/8P$	$P=13$	0.6292
	U922JB-5870	$(1+2p)/8p$	$p=13$	0.6292
	UH9ZTD-5875	*	*	0.6294
	Y4AJ3F-5875	$c(k1)+2ac(k0)/2ac$	$a=13 \ c=12$	0.62925
	YCLKQA-5875	$(1+2p)/8p$	$p=0.330$	0.6292
	YMM6T3-5870	$(1+2p)/8p$	$P=0.3296$	0.6292
	YRF3DE-5870	$(1+2s)/8s$	$s=13$	0.6292
	ZT8MM6-5870	$(1+2p)/8p$	$p=13$	0.6292

Statistical Analysis Summary of D8S1179

Likelihood Ratio Mode: 0.6292

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D10S1248	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXXA4-5870	$pq/2/2pq$	$p=15 \ q=16$	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	$p=15 \ q=16 \ r=13$	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(p^2/4)/p^2$	$p = 13$	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=15 \ q=16$	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(ab)/(ab)=0.25$	$a=15 \ b=16$	0.25000
	JA9ZWV-5870	$(C^2)(1/4)/C^2$	C: 13	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D10S1248	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=15 q=16 r=13	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2bc(k0)/2bc	b=15 d=16	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of D10S1248
Likelihood Ratio Mode: 0.2500

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D12S391	26EQHD-5875	$1 + 2p/8p$	$p = 22$	1.56
	29E3DD-5875	$(1 + 2p)/8p$	$p=22$	1.5575
	2CXA4-5870	$(1 + 2p)/8p$	$p=22$	1.558
	2L2ABE-5875	$(1 + 2a)/8a$	$a = 22$	1.558
	3KN2Q7-5870	$(1 + 2r)/8r$	$r=22$	1.5575
	3PGZ62-5870	$(0.25a + 0.5ac)/2ac$	$a=20 \ c=22$	1.5575
	3V97VC-5875	$(1 + 2a)/8a$	$a=22$	1.557
	4HTX8A-5875	$1 + 2P/8*P$	$P=22$	1.55753138075314
	698T34-5870	$(1 + 2p)/8p$	$p=22$	1.558
	6AHWLA-5870	$(1 + 2p)/8p$	$p=22$	1.557531381
	6PRJ34-5870	$(1 + 2r)/8r$	$r=22$	1.5575
	7899LA-5870	$(1 + 2P_i)/8P_i$	22	1.5575
	79GHD8-5870	$(1 + 2p)/8p$	$p=22 \ q=20 \ r=21$	1.557
	7CFUA8-5870	$(1 + 2p)/8p$	$p = 22$	1.558
	7FYP6X-5870	$(1 + 2q)/8q$	$q = 22$	1.5575
	7KUJ3Y-5870	$(1 + 2p)/8p$	$p = 22$	1.558
	8JH69X-5870	$(1 + 2p)/8p$	$p=22$	1.558
	8XX7ZA-5875	$(1 + 2*R11)/(8*R11)$	22: 0.0956	1.5575
	9N4FT8-5870	$(1 + 2p)/8p$	$p=22$	1.5575
	9ZZLL7-5875			0.6419
	AXP6VX-5870	$(1 + 2r)/8r$	$r=22$	1.5575
	BTBQX7-5875	$(p + q + 4pq)/8pq$	$p=20 \ q=22$	0.6419
	CE7QTU-5870	$(1 + 2p)/8p$	$p=22$	1.558
	DJXGDV-5870	$(1 + 2r)/8r$	$r = 22$	1.5575
	DK8JZU-5870	$(1 + 2r)/8r$	$r=22$	1.5575
	GU6JXX-5870	$(1 + 2*P[22])/(8*P[22])$	$P[22]$	1.5575
	HNF3CK-5870	$(1 + 2p)/8p$	$p=22$	1.5575
	J6WQYK-5870	$(0.25b + 0.5ab)/2ab$	$a=22 \ b=20$	1.5575
	JA9ZVW-5870	$[(C/2)(1/2)] + [(2BC)(1/4)]/2BC$	B: 22 C: 21	1.5575
	JLHCGP-5870	$(1 + 2r)/8r$	$r=22$	1.5575
	JW4FPP-5870	$(1 + 2p)/8p$	$p=22$	1.5575
	KBJ2LN-5870	$(1 + 2r)/8r$	$r=22$	1.5575
	KK7XKV-5870	$1 + 2P/8P$	22	1.5575
	L6A4MU-5875	$(1 + 2b)/8b$	$b=22$	1.5575

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D12S391	L7K69T-5875	$(1 + 2p)/8p$	p=22	1.5575
	LPXMFT-5870	$(1 + 2a)/8a$	A=22	1.558
	U6H6NL-5870	$(1 + 2P)/8P$	P=22	1.5575
	U922JB-5870	$(1 + 2q)/8q$	q=22	1.558
	Y4AJ3F-5875	$c(k1) + 2ac(k0)/2ac$	a=22 c=21	1.5575
	YCLKQA-5875	$(1 + 2q)/8q$	q=0.096	1.5575
	YMM6T3-5870	$(1 + 2p)/8p$	P=0.0956	1.5575
	YRF3DE-5870	$(1 + 2v)/8v$	v = 22	1.5575
	ZT8MM6-5870	$(1 + 2p)/8p$	p=22	1.558
Statistical Analysis Summary of D12S391			Likelihood Ratio Mode:	1.5575

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D13S317	26EQHD-5875	$1+p/4p$	$p = 12$	1.18
	29E3DD-5875	$(1+p)/4p$	$p=12$	1.1804
	2CXA4-5870	$(1+p)/4p$	$p=12$	1.180
	2L2ABE-5875	$(1+a)/4a$	$a = 12$	1.180
	3KN2Q7-5870	$(1+p)/4p$	$p=12$	1.1804
	3PGZ62-5870	$(0.5a+0.5ab)/2ab$	$a=13 \ b=12$	1.1804
	3V97VC-5875	$(1+a)/4a$	$a=12$	1.180
	4HTX8A-5875	$1+P/8*P$	$P=12$	1.180405657
	698T34-5870	$(1+p)/4p$	$p=12$	1.180
	6AHWLA-5870	$(1+p)/4p$	$p=12$	1.180405657
	6PRJ34-5870	$(1+p)/4p$	$p=12$	1.1804
	7899LA-5870	$(1+P_i)/4P_i$	12	1.1804
	79GHD8-5870	$(1+p)/4p$	$p=12 \ q=13$	1.1804
	7CFUA8-5870	$(1+p)/4p$	$p = 12$	1.180
	7FYP6X-5870	$(1+p)/4p$	$p = 12$	1.1804
	7KUJ3Y-5870	$(1+p)/4p$	$p = 12$	1.180
	8JH69X-5870	$(1+p)/4p$	$p=12$	1.180
	8XX7ZA-5875	$(1+P_{12})/(4*P_{12})$	12: 0.2687	1.1804
	9N4FT8-5870	$(1+p)/4p$	$p=12$	1.1804
	9ZZLL7-5875			0.8472
	AXP6VX-5870	$(1+p)/4p$	$p=12$	1.1804
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=12 \ q=13$	0.8472
	CE7QTU-5870	$(1+p)/4p$	$p=12$	1.180
	CGE3AV-5875			1.142
	DJXGDV-5870	$(1+p)/4p$	$p = 12$	1.1804
	DK8JZU-5870	$(1+p)/4p$	$p=12$	1.1804
	GU6JXX-5870	$(1+P[12])/(4*P[12])$	$P[12]$	1.1804
	HMY9AP-5870	$(1+p)/4p$	$p = 12$	1.1804
	HNF3CK-5870	$(1+p)/4p$	$p=12$	1.1804
	J6WQYK-5870	$(0.5a+0.5ab)/2ab$	$a=13 \ b=12$	1.1804
	JA9ZWW-5870	$[(A/2)(1/2)] + [(A^2)(1/4)]/A^2$	A: 12	1.1804
	JLHCGP-5870	$(1+p)/4p$	$p=12$	1.1804
	JW4FPP-5870	$(1+p)/4p$	$p=12$	1.1804
	KBJ2LN-5870	$(1+p)/4p$	$p=12$	1.1804

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D13S317	KK7XKV-5870	$1 + P/4P$	12	1.1804
	L6A4MU-5875	$(1 + a)/4a$	$a = 12$	1.1804
	L7K69T-5875	$(1 + p)/4p$	$p = 12$	1.1804
	LPXMFT-5870	$(1 + a)/4a$	$A = 12$	1.180
	U6H6NL-5870	$(1 + P)/4P$	$P = 12$	1.1809
	U922JB-5870	$(1 + p)/4p$	$p = 12$	1.180
	UH9ZTD-5875	*	*	1.142
	Y4AJ3F-5875	$a(k1) + a*a(k0)/a*a$	$a = 12$	1.180406
	YCLKQA-5875	$(1 + p)/4p$	$p = 0.269$	1.1804
	YMM6T3-5870	$(1 + p)/4p$	$P = 0.2687$	1.1804
	YRF3DE-5870	$(1 + s)/4s$	$s = 12$	1.1804
	ZT8MM6-5870	$(1 + p)/4p$	$p = 12$	1.180
Statistical Analysis Summary of D13S317			Likelihood Ratio Mode: 1.1804	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D16S539	26EQHD-5875	$1 + 2p/8p$	$p = 12$	0.65
	29E3DD-5875	$(1 + 2p)/8p$	$p = 12$	0.6476
	2CXXA4-5870	$(1 + 2p)/8p$	$p = 12$	0.6476
	2L2ABE-5875	$(1 + 2a)/8a$	$a = 12$	0.6476
	3KN2Q7-5870	$(1 + 2r)/8r$	$r = 12$	0.6475
	3PGZ62-5870	$(0.25a + 0.5ac)/2ac$	$a = 10 \quad c = 12$	0.64758
	3V97VC-5875	$(1 + 2a)/8a$	$a = 12$	0.6475
	4HTX8A-5875	$1 + 2P/8*P$	$P = 12$	0.64758269720 1018
	698T34-5870	$(1 + 2p)/8p$	$p = 12$	0.6476
	6AHWLA-5870	$(1 + 2p)/8p$	$p = 12$	0.647582697
	6PRJ34-5870	$(1 + 2r)/8r$	$r = 12$	0.6475
	7899LA-5870	$(1 + 2P_i)/8P_i$	12	0.6476
	79GHD8-5870	$(1 + 2p)/8p$	$p = 12 \quad q = 10 \quad r = 11$	0.6476
	7CFUA8-5870	$(1 + 2p)/8p$	$p = 12$	0.6476
	7FYP6X-5870	$(1 + 2q)/8q$	$q = 12$	0.6476
	7KUJ3Y-5870	$(1 + 2p)/8p$	$p = 12$	0.6476
	8JH69X-5870	$(1 + 2p)/8p$	$p = 12$	0.6476
	8XX7ZA-5875	$(1 + 2*R13)/(8*R13)$	12: 0.3144	0.6476
	9N4FT8-5870	$(1 + 2p)/8p$	$p = 12$	0.6475
	9ZZLL7-5875			1.5442
	AXP6VX-5870	$(1 + 2r)/8r$	$r = 12$	0.6475
	BTBQX7-5875	$(1 + 4p)/8p$	$p = 10$	1.5442
	CE7QTU-5870	$(1 + 2p)/8p$	$p = 12$	0.6476
	CGE3AV-5875			0.6472
	DJXGDV-5870	$(1 + 2r)/8r$	$r = 12$	0.6476
	DK8JZU-5870	$(1 + 2r)/8r$	$r = 12$	0.6475
	GU6JXX-5870	$(1 + 2*P[12])/(8*P[12])$	$P[12]$	0.6476
	HMY9AP-5870	$(1 + 2p)/8p$	$p = 12$	0.6476
	HNF3CK-5870	$(1 + 2p)/8p$	$p = 12$	0.6476
	J6WQYK-5870	$(0.25b + 0.5ab)/2ab$	$a = 12 \quad b = 10$	0.64758
	JA9ZVW-5870	$[(C/2)(1/2)] + [(2BC)(1/4)]/2BC$	B: 12 C: 11	0.6476
	JLHCGP-5870	$(1 + 2r)/8r$	$r = 12$	0.6475
	JW4FPP-5870	$(1 + 2p)/8p$	$p = 12$	0.6475
	KBJ2LN-5870	$(1 + 2r)/8r$	$r = 12$	0.6475

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D16S539	KK7XKV-5870	$1 + 2P/8P$	12	0.6475
	L6A4MU-5875	$(1 + 2b)/8b$	b=12	0.6476
	L7K69T-5875	$(1 + 2p)/8p$	p=12	0.6476
	LPXMFT-5870	$(1 + 2a)/8a$	A=12	0.6476
	U6H6NL-5870	$(1 + 2P)/8P$	P=12	0.6476
	U922JB-5870	$(1 + 2q)/8q$	q=12	0.6476
	UH9ZTD-5875	*	*	0.6472
	Y4AJ3F-5875	$c(k1) + 2ac(k0)/2ac$	a=12 c=11	0.64758
	YCLKQA-5875	$(1 + 2q)/8q$	q=0.314	0.6476
	YMM6T3-5870	$(1 + 2p)/8p$	P=0.3144	0.6475
	YRF3DE-5870	$(1 + 2s)/8s$	s = 12	0.6476
	ZT8MM6-5870	$(1 + 2p)/8p$	p=12	0.6476
Statistical Analysis Summary of D16S539			Likelihood Ratio Mode: 0.6476	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D18S51	26EQHD-5875	$1 + 2p/8p$	$p = 17$	1.15
	29E3DD-5875	$(1 + 2p)/8p$	$p = 17$	1.1525
	2CXA4-5870	$(1 + 2p)/8p$	$p = 17$	1.153
	2L2ABE-5875	$(1 + 2a)/8a$	$a = 17$	1.153
	3KN2Q7-5870	$(1 + 2r)/8r$	$r = 17$	1.1525
	3PGZ62-5870	$(0.25a + 0.5ac)/2ac$	$a = 15 \quad c = 17$	1.1525
	3V97VC-5875	$(1 + 2a)/8a$	$a = 17$	1.152
	4HTX8A-5875	$1 + 2P/8*P$	$P = 17$	1.15252707581227
	698T34-5870	$(1 + 2p)/8p$	$p = 17$	1.153
	6AHWLA-5870	$(1 + 2p)/8p$	$p = 17$	1.152527076
	6PRJ34-5870	$(1 + 2r)/8r$	$r = 17$	1.1525
	7899LA-5870	$(1 + 2P_i)/8P_i$	17	1.1525
	79GHD8-5870	$(1 + 2p)/8p$	$p = 17 \quad q = 15 \quad r = 16$	1.1525
	7CFUA8-5870	$(1 + 2p)/8p$	$p = 17$	1.153
	7FYP6X-5870	$(1 + 2q)/8q$	$q = 17$	1.1525
	7KUJ3Y-5870	$(1 + 2p)/8p$	$p = 17$	1.153
	8JH69X-5870	$(1 + 2p)/8p$	$p = 17$	1.153
	8XX7ZA-5875	$(1 + 2*R14)/(8*R14)$	17: 0.1385	1.1525
	9N4FT8-5870	$(1 + 2p)/8p$	$p = 17$	1.1525
	9ZZLL7-5875			0.8677
	AXP6VX-5870	$(1 + 2r)/8r$	$r = 17$	1.1525
	BTBQX7-5875	$(p + q + 4pq)/8pq$	$p = 16 \quad q = 17$	0.8677
	CE7QTU-5870	$(1 + 2p)/8p$	$p = 17$	1.153
	CGE3AV-5875			1.117
	DJXGDV-5870	$(1 + 2r)/8r$	$r = 17$	1.1525
	DK8JZU-5870	$(1 + 2r)/8r$	$r = 17$	1.1525
	GU6JXX-5870	$(1 + 2*P[17])/(8*P[17])$	$P[17]$	1.1525
	HMY9AP-5870	$(1 + 2p)/8p$	$p = 17$	1.1525
	HNF3CK-5870	$(1 + 2p)/8p$	$p = 17$	1.1525
	J6WQYK-5870	$(0.25b + 0.5ab)/2ab$	$a = 17 \quad b = 15$	1.1525
	JA9ZVW-5870	$[(C/2)(1/2)] + [(2BC)(1/4)]/2BC$	B: 17 C: 16	1.1525
	JLHCGP-5870	$(1 + 2r)/8r$	$r = 17$	1.1525
	JW4FPP-5870	$(1 + 2p)/8p$	$p = 17$	1.1525
	KBJ2LN-5870	$(1 + 2r)/8r$	$r = 17$	1.1525

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D18S51	KK7XKV-5870	$1 + 2P/8P$	17	1.1525
	L6A4MU-5875	$(1 + 2b)/8b$	b=17	1.0275
	L7K69T-5875	$(1 + 2p)/8p$	p=17	1.1525
	LPXMFT-5870	$(1 + 2a)/8a$	A=17	1.153
	U6H6NL-5870	$(1 + 2P)/8P$	P=17	1.1525
	U922JB-5870	$(1 + 2q)/8q$	q=17	1.153
	UH9ZTD-5875	*	*	1.117
	Y4AJ3F-5875	$c(k1) + 2ac(k0)/2ac$	a=17 c=16	1.15253
	YCLKQA-5875	$(1 + 2q)/8q$	q=0.139	1.1525
	YMM6T3-5870	$(1 + 2p)/8p$	P=0.1385	1.1525
	YRF3DE-5870	$(1 + 2t)/8t$	t = 17	1.1525
	ZT8MM6-5870	$(1 + 2p)/8p$	p=17	1.153
Statistical Analysis Summary of D18S51			Likelihood Ratio Mode: 1.1525	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D19S433	26EQHD-5875	$1 + 2p/8p$	$p = 14$	0.60
	29E3DD-5875	$(1 + 2p)/8p$	$p = 14$	0.5958
	2CXXA4-5870	$(1 + 2p)/8p$	$p = 14$	0.5958
	2L2ABE-5875	$(1 + 2a)/8a$	$a = 14$	0.5958
	3KN2Q7-5870	$(1 + 2r)/8r$	$r = 14$	0.5957
	3PGZ62-5870	$(0.25a + 0.5ac)/2ac$	$a = 12 \quad c = 14$	0.59578
	3V97VC-5875	$(1 + 2a)/8a$	$a = 14$	0.5957
	4HTX8A-5875	$1 + 2P/8*P$	$P = 14$	0.595781466113416
	698T34-5870	$(1 + 2p)/8p$	$p = 14$	0.5958
	6AHWLA-5870	$(1 + 2p)/8p$	$p = 14$	0.595781466
	6PRJ34-5870	$(1 + 2r)/8r$	$r = 14$	0.5957
	7899LA-5870	$(1 + 2P_i)/8P_i$	14	0.5958
	79GHD8-5870	$(1 + 2p)/8p$	$p = 14 \quad q = 12 \quad r = 13$	0.5958
	7CFUA8-5870	$(1 + 2p)/8p$	$p = 14$	0.5958
	7FYP6X-5870	$(1 + 2q)/8q$	$q = 14$	0.5958
	7KUJ3Y-5870	$(1 + 2p)/8p$	$p = 14$	0.5958
	8JH69X-5870	$(1 + 2p)/8p$	$p = 14$	0.5958
	8XX7ZA-5875	$(1 + 2*R15)/(8*R15)$	14: 0.3615	0.5958
	9N4FT8-5870	$(1 + 2p)/8p$	$p = 14$	0.5957
	9ZZLL7-5875			1.6785
	AXP6VX-5870	$(1 + 2r)/8r$	$r = 14$	0.5957
	BTBQX7-5875	$(p + q + 4pq)/8pq$	$p = 12 \quad q = 14$	1.6785
	CE7QTU-5870	$(1 + 2p)/8p$	$p = 14$	0.5958
	CGE3AV-5875			0.5970
	DJXGDV-5870	$(1 + 2r)/8r$	$r = 14$	0.5958
	DK8JZU-5870	$(1 + 2r)/8r$	$r = 14$	0.5957
	GU6JXX-5870	$(1 + 2*P[14])/(8*P[14])$	$P[14]$	0.5958
	HMY9AP-5870	$(1 + 2p)/8p$	$p = 14$	0.5958
	HNF3CK-5870	$(1 + 2p)/8p$	$p = 14$	0.5958
	J6WQYK-5870	$(0.25b + 0.5ab)/2ab$	$a = 14 \quad b = 12$	0.59578
	JA9ZVW-5870	$[(C/2)(1/2)] + [(2BC)(1/4)]/2BC$	B: 14 C: 13	0.5958
	JLHCGP-5870	$(1 + 2r)/8r$	$r = 14$	0.5957
	JW4FPP-5870	$(1 + 2p)/8p$	$p = 14$	0.5957
	KBJ2LN-5870	$(1 + 2r)/8r$	$r = 14$	0.5957

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D19S433	KK7XKV-5870	$1 + 2P/8P$	14	0.5957
	L6A4MU-5875	$(1 + 2b)/8b$	b=14	0.5958
	L7K69T-5875	$(1 + 2p)/8p$	p=14	0.5958
	LPXMFT-5870	$(1 + 2a)/8a$	A=14	0.5958
	U6H6NL-5870	$(1 + 2P)/8P$	P=14	0.5957
	U922JB-5870	$(1 + 2q)/8q$	q=14	0.5958
	UH9ZTD-5875	*	*	0.5970
	Y4AJ3F-5875	$c(k1) + 2ac(k0)/2ac$	a=14 c=13	0.59578
	YCLKQA-5875	$(1 + 2q)/8q$	q=0.362	0.5958
	YMM6T3-5870	$(1 + 2p)/8p$	P=0.3615	0.5957
	YRF3DE-5870	$(1 + 2r)/8r$	r = 14	0.5958
	ZT8MM6-5870	$(1 + 2p)/8p$	p=14	0.5958
Statistical Analysis Summary of D19S433			Likelihood Ratio Mode:	0.5958

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D21S11	26EQHD-5875	$1 + 2p/8p$	$p = 32.2$	1.64
	29E3DD-5875	$(1 + 2p)/8p$	$p=32.2$	1.6389
	2CXXA4-5870	$(1 + 2p)/8p$	$p=32.2$	1.639
	2L2ABE-5875	$(1 + 2a)/8a$	$a = 32.2$	1.639
	3KN2Q7-5870	$(1 + 2a)/8a$	$a=32.2$	1.6388
	3PGZ62-5870	$(0.25a + 0.5ac)/2ac$	$a=28 \ c=32.2$	1.6389
	3V97VC-5875	$(1 + 2a)/8a$	$a=32.2$	1.6388
	4HTX8A-5875	$1 + 2P/8*P$	$P=32.2$	1.63888888888889
	698T34-5870	$(1 + 2p)/8p$	$p=32.2$	1.639
	6AHWLA-5870	$(1 + 2p)/8p$	$p=32.2$	1.638888889
	6PRJ34-5870	$(1 + 2a)/8a$	$a=32.2$	1.6388
	7899LA-5870	$(1 + 2P_i)/8P_i$	32.2	1.6389
	79GHD8-5870	$(1 + 2p)/8p$	$p=32.2 \ q=28 \ r=29$	1.6389
	7CFUA8-5870	$(1 + 2p)/8p$	$p = 32.2$	1.639
	7FYP6X-5870	$(1 + 2q)/8q$	$q = 32.2$	1.6389
	7KUJ3Y-5870	$(1 + 2p)/8p$	$p = 32.2$	1.639
	8JH69X-5870	$(1 + 2p)/8p$	$p=32.2$	1.639
	8XX7ZA-5875	$(1 + 2*R16)/(8*R16)$	32.2: 0.0900	1.6389
	9N4FT8-5870	$(1 + 2p)/8p$	$p=32.2$	1.6388
	9ZZLL7-5875			0.6103
	AXP6VX-5870	$(1 + 2a)/8a$	$a=32.2$	1.6388
	BTBQX7-5875	$(p + q + 4pq)/8pq$	$p=28 \ q=32.2$	0.6103
	CE7QTU-5870	$(1 + 2p)/8p$	$p=32.2$	1.639
	CGE3AV-5875			1.537
	DJXGDV-5870	$(1 + 2a)/8a$	$a = 32.2$	1.6389
	DK8JZU-5870	$(1 + 2a)/8a$	$a=32.2$	1.6388
	GU6JXX-5870	$(1 + 2*P[32.2])/(8*P[32.2])$	$P[32.2]$	1.6389
	HMY9AP-5870	$(1 + 2p)/8p$	$p = 32.2$	1.6389
	HNF3CK-5870	$(1 + 2p)/8p$	$p=32.2$	1.6389
	J6WQYK-5870	$(0.25b + 0.5ab)/2ab$	$a=32.2 \ b=28$	1.6389
	JA9ZWV-5870	$[(C/2)(1/2)] + [(2BC)(1/4)]/2BC$	B: 32.2 C: 29	1.6389
	JLHCGP-5870	$(1 + 2a)/8a$	$a=32.2$	1.6388
	JW4FPP-5870	$(1 + 2p)/8p$	$p=32.2$	1.6388
	KBJ2LN-5870	$(1 + 2a)/8a$	$a=32.2$	1.6388

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D21S11	KK7XKV-5870	$1 + 2P/8P$	32.2	1.6389
	L6A4MU-5875	$(1 + 2b)/8b$	b=32.2	1.6389
	L7K69T-5875	$(1 + 2p)/8p$	p=32.2	1.6389
	LPXMFT-5870	$(1 + 2a)/8a$	A=32.2	1.639
	U6H6NL-5870	$(1 + 2P)/8P$	P=32.2	1.6389
	U922JB-5870	$(1 + 2q)/8q$	q=32.2	1.639
	UH9ZTD-5875	*	*	1.537
	Y4AJ3F-5875	$c(k1) + 2ac(k0)/2ac$	a=32.2 c=29	1.63889
	YCLKQA-5875	$(1 + 2q)/8q$	q=0.090	1.6389
	YMM6T3-5870	$(1 + 2p)/8p$	P=0.09	1.6388
	YRF3DE-5870	$(1 + 2c)/8c$	c = 32.2	1.6389
	ZT8MM6-5870	$(1 + 2p)/8p$	p=32.2	1.639
Statistical Analysis Summary of D21S11			Likelihood Ratio Mode:	1.6389

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D22S1045	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXA4-5870	$rs/2/2rs$	$r=11 \ s=14$	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	$p=15 \ q=16 \ r=11 \ s=14$	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(2pq/4)/2pq$	$p = 11 \ q = 14$	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=15 \ q=16$	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(ab)/(ab)$	$a=15 \ b=16$	0.25000
	JA9ZWV-5870	$(2CD)(1/4)/2CD$	C: 11 D: 14	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D22S1045	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=15 q=16 r=11 s=14	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2cd(ko)/2cd	c=11 d=14	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of D22S1045

Likelihood Ratio Mode: 0.2500

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
CSF1PO	26EQHD-5875	$1 + p/4p$	$p = 12$	0.94
	29E3DD-5875	$(1 + p)/4p$	$p = 12$	0.9443
	2CXXA4-5870	$(1 + p)/4p$	$p = 12$	0.9443
	2L2ABE-5875	$(1 + a)/4a$	$a = 12$	0.9443
	3KN2Q7-5870	$(1 + q)/4q$	$q = 12$	0.9442
	3PGZ62-5870	$(0.25a + 0.25a^2)/a^2$	$a = 12$	0.94425
	3V97VC-5875	$(1 + a)/4a$	$a = 12$	0.9942
	4HTX8A-5875	$1 + P/8 * P$	$P = 12$	0.94425159677 8673
	698T34-5870	$(1 + p)/4p$	$p = 12$	0.9443
	6AHWLA-5870	$(1 + p)/4p$	$p = 12$	0.944251597
	6PRJ34-5870	$(1 + q)/4q$	$q = 12$	0.9442
	7899LA-5870	$(1 + P_i)/4P_i$	12	0.9443
	79GHD8-5870	$(1 + p)/4p$	$p = 12 \quad q = 11$	0.9443
	7CFUA8-5870	$(1 + p)/4p$	$p = 12$	0.9443
	7FYP6X-5870	$(1 + q)/4q$	$q = 12$	0.9443
	7KUJ3Y-5870	$(1 + p)/4p$	$p = 12$	0.9443
	8JH69X-5870	$(1 + p)/4p$	$p = 12$	0.9443
	8XX7ZA-5875	$(1 + Q18)/(4 * Q18)$	12: 0.3601	0.9443
	9N4FT8-5870	$(1 + p)/4p$	$p = 12$	0.9442
	9ZZLL7-5875			1.0591
	AXP6VX-5870	$(1 + q)/4q$	$q = 12$	0.9442
	BTBQX7-5875	$(1 + 4p)/8p$	$p = 12$	1.0591
	CE7QTU-5870	$(1 + p)/4p$	$p = 12$	0.9443
	CGE3AV-5875			0.9278
	DJXGDV-5870	$(1 + q)/4q$	$q = 12$	0.9443
	DK8JZU-5870	$(1 + q)/4q$	$q = 12$	0.9442
	GU6JXX-5870	$(1 + P[12])/(4 * P[12])$	$P[12]$	0.9443
	HMY9AP-5870	$(1 + p)/4p$	$p = 12$	0.9443
	HNF3CK-5870	$(1 + p)/4p$	$p = 12$	0.9443
	J6WQYK-5870	$(0.25a + 0.25a^2)/a^2$	$a = 12$	0.94425
	JA9ZVW-5870	$[(B)(1/2)] + [(2AB)(1/4)]/2AB$	A: 12 B: 11	0.9443
	JLHCGP-5870	$(1 + q)/4q$	$q = 12$	0.9442
	JW4FPP-5870	$(1 + p)/4p$	$p = 12$	0.9442
	KBJ2LN-5870	$(1 + q)/4q$	$q = 12$	0.9442

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
CSF1PO	KK7XKV-5870	$1 + P/4P$	12	0.9442
	L6A4MU-5875	$(1 + a)/4a$	$a = 12$	0.9443
	L7K69T-5875	$(1 + p)/4p$	$p = 12$	0.9443
	LPXMFT-5870	$(1 + a)/4a$	$A = 12$	0.9443
	U6H6NL-5870	$(1 + P)/4P$	$P = 12$	0.9443
	U922JB-5870	$(1 + p)/4p$	$p = 12$	0.9443
	UH9ZTD-5875	*	*	0.9278
	Y4AJ3F-5875	$b(k1) + b(k1) + 2ab(k0)/2ab$	$a = 12 \ c = 11$	0.94425
	YCLKQA-5875	$(1 + p)/4p$	$p = 0.360$	0.9443
	YMM6T3-5870	$(1 + p)/4p$	$P = 0.3601$	0.9442
	YRF3DE-5870	$(1 + r)/4r$	$r = 12$	0.9443
	ZT8MM6-5870	$(1 + p)/4p$	$p = 12$	0.9443
Statistical Analysis Summary of CSF1PO			Likelihood Ratio Mode: 0.9443	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
FGA	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXXA4-5870	$rs/2/2rs$	$r=23 \ s=25$	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	$p=21 \ q=22 \ r=23 \ s=24$	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(2pq/4)/2pq$	$p = 23 \ q = 25$	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=21 \ q=23$	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(ab)/(ab)$	$a=21 \ b=22$	0.25000
	JA9ZWV-5870	$(2CD)(1/4)/2CD$	C: 23 D: 25	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
FGA	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=21 q=22 r=23 s=25	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2cd(ko)/2cd	c=23 d=25	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of FGA**Likelihood Ratio Mode: 0.2500**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaD	26EQHD-5875	$1 + p/4p$	$p = 12$	1.32
	29E3DD-5875	$(1 + p)/4p$	$p = 12$	1.3243
	2CXA4-5870	$(1 + p)/4p$	$p = 12$	1.324
	2L2ABE-5875	$(1 + a)/4a$	$a = 12$	1.324
	3KN2Q7-5870	$(1 + r)/4r$	$r = 12$	1.3243
	3PGZ62-5870	$(0.5a + 0.5ab)/2ab$	$a = 10 \ b = 12$	1.3243
	3V97VC-5875	$(1 + a)/4a$	$a = 12$	1.324
	4HTX8A-5875	$1 + P/8*P$	$P = 12$	1.32434465
	698T34-5870	$(1 + p)/4p$	$p = 12$	1.324
	6AHWLA-5870	$(1 + p)/4p$	$p = 12$	1.32434465
	6PRJ34-5870	$(1 + r)/4r$	$r = 12$	1.3243
	7899LA-5870	$(1 + P_i)/4P_i$	12	1.3243
	79GHD8-5870	$(1 + p)/4p$	$p = 12 \ q = 10$	1.3243
	7CFUA8-5870	$(1 + p)/4p$	$p = 12$	1.324
	7FYP6X-5870	$(1 + q)/4q$	$q = 12$	1.3243
	7KUJ3Y-5870	$(1 + p)/4p$	$p = 12$	1.324
	8JH69X-5870	$(1 + p)/4p$	$p = 12$	1.324
	8XX7ZA-5875	$(1 + Q20)/(4*Q20)$	12: 0.2327	1.3243
	9N4FT8-5870	$(1 + p)/4p$	$p = 12$	1.3243
	9ZZLL7-5875			0.7551
	AXP6VX-5870	$(1 + p)/4p$	$p = 12$	1.3243
	BTBQX7-5875	$(p + q + 4pq)/8pq$	$p = 10 \ q = 12$	0.7551
	CE7QTU-5870	$(1 + p)/4p$	$p = 12$	1.324
	DJXGDV-5870	$(1 + r)/4r$	$r = 12$	1.3243
	DK8JZU-5870	$(1 + r)/4r$	$r = 12$	1.3243
	GU6JXX-5870	$(1 + P[12])/(4*P[12])$	$P[12]$	1.3243
	HMY9AP-5870	$(1 + p)/4p$	$p = 12$	1.3243
	HNF3CK-5870	$(1 + p)/4p$	$p = 12$	1.3243
	J6WQYK-5870	$(0.5a + 0.5ab)/2ab$	$a = 10 \ b = 12$	1.3243
	JA9ZVV-5870	$[(B/2)(1/2)] + [(B^2)/(1/4)]/B^2$	A: 10 B: 12	1.3243
	JLHCGP-5870	$(1 + p)/4p$	$p = 12$	1.3243
	JW4FPP-5870	$(1 + p)/4p$	$p = 12$	1.3243
	KBJ2LN-5870	$(1 + p)/4p$	$p = 12$	1.3243
	KK7XKV-5870	$1 + P/4P$	12	1.3243

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaD	L6A4MU-5875	$(1+b)/4b$	b=12	1.3243
	L7K69T-5875	$(1+p)/4p$	p=12	1.3243
	LPXMFT-5870	$(1+a)/4a$	A=12	1.324
	U6H6NL-5870	$(1+P)/4P$	P=12	1.3243
	U922JB-5870	$(1+q)/4q$	q=12	1.324
	Y4AJ3F-5875	$a(k1)+a*a(k0)/a*a$	a=12	1.324
	YCLKQA-5875	$(1+q)/(4q)$	q=0.233	1.3243
	YMM6T3-5870	$(1+p)/4p$	P=0.2327	1.3243
	YRF3DE-5870	$(1+s)/4s$	s = 12	1.3243
	ZT8MM6-5870	$(1+p)/4p$	p=12	1.324
	Statistical Analysis Summary of PentaD			Likelihood Ratio Mode: 1.3243

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaE	26EQHD-5875	$1 + p/4p$	$p = 12$	1.50
	29E3DD-5875	$(1 + p)/4p$	$p = 12$	1.5038
	2CXXA4-5870	$(1 + p)/4p$	$p = 12$	1.504
	2L2ABE-5875	$(1 + a)/4a$	$a = 12$	1.504
	3KN2Q7-5870	$(1 + p)/4p$	$p = 12$	1.5037
	3PGZ62-5870	$(0.25a + 0.25a^2)/a^2$	$a = 12$	1.5038
	3V97VC-5875	$(1 + a)/4a$	$a = 12$	1.503
	4HTX8A-5875	$1 + P/8*P$	$P = 12$	1.503761284
	698T34-5870	$(1 + p)/4p$	$p = 12$	1.504
	6AHWLA-5870	$(1 + p)/4p$	$p = 12$	1.503761284
	6PRJ34-5870	$(1 + p)/4p$	$p = 12$	1.5037
	7899LA-5870	$(1 + P_i)/4P_i$	12	1.5038
	79GHD8-5870	$(1 + p)/4p$	$p = 12 \text{ } q = 15$	1.5038
	7CFUA8-5870	$(1 + p)/4p$	$p = 12$	1.504
	7FYP6X-5870	$(1 + p)/4p$	$p = 12$	1.5038
	7KUJ3Y-5870	$(1 + p)/4p$	$p = 12$	1.504
	8JH69X-5870	$(1 + p)/4p$	$p = 12$	1.504
	8XX7ZA-5875	$(1 + P_{21})/(4*P_{21})$	12: 0.1994	1.5038
	9N4FT8-5870	$(1 + p)/4p$	$p = 12$	1.5037
	9ZZLL7-5875			0.6651
	AXP6VX-5870	$(1 + p)/4p$	$p = 12$	1.5037
	BTBQX7-5875	$(p + q + 4pq)/8pq$	$p = 12$	0.6651
	CE7QTU-5870	$(1 + p)/4p$	$p = 12$	1.504
	DJXGDV-5870	$(1 + p)/4p$	$p = 12$	1.5038
	DK8JZU-5870	$(1 + p)/4p$	$p = 12$	1.5037
	GU6JXX-5870	$(1 + P[12])/(4*P[12])$	$P[12]$	1.5038
	HMY9AP-5870	$(1 + p)/4p$	$p = 12$	1.5038
	HNF3CK-5870	$(1 + p)/4p$	$p = 12$	1.5038
	J6WQYK-5870	$(0.25a + 0.25a^2)/a^2$	$a = 12$	1.5038
	JA9ZVV-5870	$[(B)(1/2)] + [(2AB)(1/4)]/2AB$	A: 12 B: 15	1.5038
	JLHCGP-5870	$(1 + p)/4p$	$p = 12$	1.5037
	JW4FPP-5870	$(1 + p)/4p$	$p = 12$	1.5037
	KBJ2LN-5870	$(1 + q)/4q$	$q = 12$	1.5037
	KK7XKV-5870	$1 + P/4P$	12	1.5038
	L6A4MU-5875	$(1 + a)/4a$	$a = 12$	1.5038

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaE	L7K69T-5875	$(1+p)/4p$	$p=12$	1.5038
	LPXMFT-5870	$(1+a)/4a$	$A=12$	1.504
	U6H6NL-5870	$(1+P)/4P$	$P=12$	1.5038
	U922JB-5870	$(1+p)/4p$	$p=12$	1.504
	Y4AJ3F-5875	$b(k1)+b(k1)+2ab(k0)/2ab$	$a=12\ b=15$	1.50376
	YCLKQA-5875	$(1+p)/4p$	$p=0.199$	1.5038
	YMM6T3-5870	$(1+p)/4p$	$P=0.1994$	1.5037
	YRF3DE-5870	$(1+s)/4s$	$s = 12$	1.5038
	ZT8MM6-5870	$(1+p)/4p$	$p=12$	1.504
Statistical Analysis Summary of PentaE			Likelihood Ratio Mode: 1.5038	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
SE33	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXXA4-5870	$rs/2/2rs$	$r=14 \ s=17$	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	$p=12 \ q=13 \ r=14 \ s=17$	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(2pq/4)/2pq$	$p = 14 \ q = 17$	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=12 \ q=14$	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(ab)/(ab)$	$a=12 \ b=13$	0.25000
	JA9ZWV-5870	$(2CD)(1/4)/2CD$	C: 14 D: 17	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
SE33	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=12 q=13 r=14 s=17	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2cd(ko)/2cd	c=14 d=17	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of SE33**Likelihood Ratio Mode: 0.2500**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TH01	26EQHD-5875	$(1+p)^2/(2p)^2$	$p = 9.3$	3.80
	29E3DD-5875	$(1+2p+pp)/4pp$	$p=9.3$	3.8013
	2CXXA4-5870	$(1+p)^2/4p^2$	$p=9.3$	3.801
	2L2ABE-5875	$(1+2a+2a^2)/4a^2$	$a = 9.3$	3.801
	3KN2Q7-5870	$(1+2p+pp)/4pp$	$p=9.3$	3.8013
	3PGZ62-5870	$(0.25+0.5a+0.25a^2)/a^2$	$a=9.3$	3.8013
	3V97VC-5875	$(1+a)^2/(2a)^2$	$a=9.3$	3.801
	4HTX8A-5875	$(1+P)^2/(2P)^2$	$P=9.3$	3.801312792
	698T34-5870	$(1+2p+pp)/4pp$	$p=9.3$	3.801
	6AHWLA-5870	$(1+p)^2/(2p)^2$	$p=9.3$	3.801312792
	6PRJ34-5870	$(1+2p+pp)/4pp$	$p=9.3$	3.8013
	7899LA-5870	$(1+P_i)^2/(2P_i)^2$	9.3	3.8013
	79GHD8-5870	$(1+p)^2/(2p)^2$	$p=9.3$	3.8013
	7CFUA8-5870	$(1+2p+pp)/4pp$	$p = 9.3$	3.801
	7FYP6X-5870	$1+2p+p^2/4p^2$	$p = 9.3$	3.8013
	7KUJ3Y-5870	$(1+p)^2/4p^2$	$p = 9.3$	3.801
	8JH69X-5870	$(1+p)^2/4p^2$	$p=9.3$	3.801
	8XX7ZA-5875	$(1+2*P23+P23*P23)/(4*P23*P23)$	9.3: 0.3449	3.8013
	9N4FT8-5870	$(1+p)^2/(2p)^2$	$p=9.3$	3.8013
	9ZZLL7-5875			0.2630
	AXP6VX-5870	$(1+2p+pp)/4pp$	$p=9.3$	3.8013
	BTBQX7-5875	$(1+4p)/8p$	$p=9.3$	0.2630
	CE7QTU-5870	$(1+p)^2/4p^2$	$p=9.3$	3.801
	CGE3AV-5875			3.546
	DJXGDV-5870	$(1+2p+pp)/4pp$	$p = 9.3$	3.8013
	DK8JZU-5870	$(1+2p+pp)/4pp$	$p=9.3$	3.8013
	GU6JXX-5870	$((1+P[9.3])*(1+P[9.3]))/(4*P[9.3]*P[9.3])$	$P[9.3]$	3.8013
	HMY9AP-5870	$((1+p)^2)/(4p^2)$	$p = 9.3$	3.8013
	HNF3CK-5870	$(1+p)^2/(2*P)^2$	$p=9.3$	3.8013
	J6WQYK-5870	$(0.25+0.5a+0.25a^2)/a^2$	$a=9.3$	3.8013
	JA9ZVW-5870	$[1/4+(A)(1/2)+(A^2)(1/4)]/A^2$	A: 9.3	3.8013
	JLHCGP-5870	$(1+2p+pp)/4pp$	$p=9.3$	3.8013
	JW4FPP-5870	$(1+2p+pp)/4pp$	$p=9.3$	3.8013

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TH01	KBJ2LN-5870	$(1 + 2p + pp)/4pp$	$p=9.3$	3.8013
	KK7XKV-5870	$(P+1)^2/4(P)^2$	9.3	3.8013
	L6A4MU-5875	$(a+1)^2/4a^2$	$a=9.3$	3.8013
	L7K69T-5875	$(1+p)^2/(2p)^2$	$p=9.3$	3.8013
	LPXMFT-5870	$[(1+a)^2]/[(2a)^2]$	$A=9.3$	3.801
	U6H6NL-5870	$((1+P)*(1+P))/(2P*2P)$	$P=9.3$	3.8013
	U922JB-5870	$(1+p)^2/4p^2$	$p=9.3$	3.801
	UH9ZTD-5875	*	*	3.546
	Y4AJ3F-5875	$1(k2)+a(k1)+a(k1)+a*a(k0)/a*a$	$a=9.3$	3.8013
	YCLKQA-5875	$(1 + 2p + pp)/4pp$	$p=0.345$	3.8013
	YMM6T3-5870	$(1+p)^2/4p^2$	$P=0.3449$	3.8013
	YRF3DE-5870	$(1 + 2a + aa)/4aa$	$a = 9.3$	3.8013
	ZT8MM6-5870	$[(1+p)^2]/4p^2$	$p=9.3$	3.801
Statistical Analysis Summary of TH01			Likelihood Ratio Mode: 3.8013	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TPOX	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXXA4-5870	$qr/2/2qr$	$q=8 \ r=12$	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	$p=11 \ q=8 \ r=12$	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(2qr/4)/2qr$	$q = 8 \ r = 12$	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=11 \ q=12$	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(aa)/(aa)$	$a=11$	0.25000
	JA9ZWV-5870	$(2BC)(1/4)/2BC$	B: 8 C: 12	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TPOX	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=11 q=8 r=12	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2bc(k0)/2bc	b=8 c=12	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of TPOX

Likelihood Ratio Mode: 0.2500

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
vWA	26EQHD-5875	1/4		0.25
	29E3DD-5875	0.25		0.25
	2CXXA4-5870	$rs/2/2rs$	$r=18\ s=19$	0.2500
	2L2ABE-5875	1/4		0.2500
	3KN2Q7-5870	1/4		0.2500
	3PGZ62-5870			0.25000
	3V97VC-5875	1/4		0.2500
	4HTX8A-5875	1/4		0.25
	698T34-5870	1/4		0.2500
	6AHWLA-5870	1/4		0.25
	6PRJ34-5870	1/4		0.2500
	7899LA-5870	1/4		0.25
	79GHD8-5870	1/4	$p=14\ q=21\ r=18\ s=19$	0.25
	7CFUA8-5870	1/4		0.2500
	7FYP6X-5870	$(2pq/4)/2pq$	$p = 18\ q = 19$	0.25
	7KUJ3Y-5870	1/4		0.2500
	8JH69X-5870	1/4		0.2500
	8XX7ZA-5875	1/(4)	--	0.2500
	9N4FT8-5870	1/4		0.25
	9ZZLL7-5875			4
	AXP6VX-5870	1/4		0.2500
	BTBQX7-5875	$(p+q+4pq)/8pq$	$p=14\ q=21$	4.0000
	CE7QTU-5870	1/4		0.2500
	CGE3AV-5875			0.2500
	DJXGDV-5870	1/4		0.2500
	DK8JZU-5870	1/4		0.2500
	GU6JXX-5870	0.25	-	0.25
	HMY9AP-5870	1/4	-	0.2500
	HNF3CK-5870	1/4		0.2500
	J6WQYK-5870	$0.25(ab)/(ab)$	$a=14\ b=21$	0.25000
	JA9ZWV-5870	$(2CD)(1/4)/2CD$	C: 18 D: 19	0.2500
	JLHCGP-5870	1/4		0.2500
	JW4FPP-5870	1/4		0.2500
	KBJ2LN-5870	1/4		0.2500
	KK7XKV-5870	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
vWA	L6A4MU-5875	1/4		0.25
	L7K69T-5875	1/4		0.25
	LPXMFT-5870			0.2500
	U6H6NL-5870	1/4	-	0.25
	U922JB-5870	1/4	p=14 q=21 r=18 s=19	0.2500
	UH9ZTD-5875	*	*	0.2500
	Y4AJ3F-5875	2cd(ko)/2cd	c=18 d=19	0.25
	YCLKQA-5875	1/4		0.2500
	YMM6T3-5870	1/4		0.25
	YRF3DE-5870	(1/4)		0.2500
	ZT8MM6-5870	1/4		0.2500

Statistical Analysis Summary of vWA

Likelihood Ratio Mode: 0.2500

Kinship DNA Statistics

Is the relationship of **Caucasian Full Sibling** supported by the genetic evidence?

TABLE 7

WebCode-Test	Kinship Index	Claim Supported?
26EQHD-5875	1.2E-06	No
29E3DD-5875	0.000001235	No
2CXXA4-5870	0.00000079	Inconclusive
2L2ABE-5875	1.235E-06	No
3KN2Q7-5870	1.2353E-06	No
3PGZ62-5870	0.000001235	No
3V97VC-5875	1/LR = 8.095E+05	No
4HTX8A-5875	1.23535E-06	No
698T34-5870	1.235E-06	No
6AHWLA-5870	1.23535E-06	No
6PRJ34-5870	1.2353E-06	No
7899LA-5870	0.000001235347456	No
79GHD8-5870	7.936E-06	No
7CFUA8-5870	1.235E-06	No
7FYP6X-5870	0.000001235	No
7KUJ3Y-5870	0.00000079	Inconclusive
8JH69X-5870	0.00000079	Inconclusive
8XX7ZA-5875	0.00000124	No
9N4FT8-5870	0.0000012345	No
9ZZLL7-5875	809,000	Yes
AXP6VX-5870	1.2353E-06	No
BTBQX7-5875	0.002352	No
CE7QTU-5870	0.00000079	No
CGE3AV-5875	0.00000032	No
DJXGDV-5870	0.000001235	No
DK8JZU-5870	1.2353E-06	No
GU6JXX-5870	0.000001235386438	No
HMY9AP-5870	0.00	No
HN3F3CK-5870	0.00000123535	No

TABLE 7 - Kinship DNA Statistics

WebCode-Test	Kinship Index	Claim Supported?
J6WQYK-5870	0.000001235	No
JA9ZWV-5870	0.00000123534745559829	Inconclusive
JLHCGP-5870	0.000001235	No
JW4FPP-5870	1.2353E-06	No
KBJ2LN-5870	1.2353E-06	No
KK7XKV-5870	0.000001235	No
L6A4MU-5875	0.0000011014	No
L7K69T-5875	LR=1.2353E-0.6; Probability=0,00012353%	No
LPXMFT-5870	0.000001235	No
U6H6NL-5870	1.2353E-6	Inconclusive
U922JB-5870	0.00000079	No
UH9ZTD-5875	0.00000032	No
Y4AJ3F-5875	0	No
YCLKQA-5875	0.000004941	No
YMM6T3-5870	1.2345E-6	No
YRF3DE-5870	0.000001235	No
ZT8MM6-5870	0.00000079	Inconclusive

Response Summary		Participants: 46
<i>Is the relationship claim of Caucasian Full Sibling supported?</i>		
Yes	1	
No	39	
Inconclusive	6	

Additional Kinship Statistical Results

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
2CXXA4-5870	Per laboratory protocol, if a full sibling KI does not meet or exceed 33 the relationship is reported as Inconclusive.
2L2ABE-5875	In accordance with the AABB Standards for Relationship Testing Laboratories, "Likelihood ratios less than 0.1 to 1 shall be considered genetic evidence against the alleged relationship (and supporting the alternative)."
3PGZ62-5870	AUTOSOMAL STRs: The DNA profile is single source. The kinship index does not support the hypothesis that Profile B is the full sibling of Profile A. Additional Notes: The DNA profile is single source and from a female. The profile was provided by the proficiency test provider. Two databases were used when calculating statistics (FBI and NIST). Statistics were calculated for laboratory reporting purposes using the FBI database without Penta E and Penta D per standard laboratory procedure. The results reported for part III [Table 7: Kinship DNA Statistics], questions 1-2 of the proficiency test were calculated using the NIST database/allele frequencies provided by the proficiency test provider with Penta E and Penta D included.
3V97VC-5875	Sibship LR calculated by hand above and additionally w laboratory specific software. [Laboratory] utilizes a laboratory specific population database and DBLR software accounting for linkage in kinship analysis. Following [Laboratory] SOPs the sibship likelihood ratio of $1/LR = 1.7$ million was calculated supporting the conclusion that sibling A is not a full sibling of sibling B.
698T34-5870	On comparison of the DNA profiles provided, I found that the relationship between the Caucasian Female A and B are not Full Sibling.
6AHWLA-5870	The obtained likelihood ratio ($LR=1.23535E-06$) provides limited support for the proposed relationship of female A being a full sibling of female B rather than them being unrelated. Hence, it favors the hypothesis of unrelatedness.
7899LA-5870	The LR value of 0.000001235347456 supports the hypothesis that individuals A and B are excluded from having a biological relationship as sisters.
79GHD8-5870	The combined kinship index being less than 1 suggests the two females profiles A and B are unrelated.
7FYP6X-5870	The kinship index does not support the hypothesis that Profile A is the full sibling of Profile B.
7KUJ3Y-5870	D12S391 is not included in combined kinship index per policy. Per lab protocol, if sibling KI does not meet or exceed 33 then the relationship is reported as inconclusive.
8JH69X-5870	Per lab policy, for a kinship index that does not meet the minimum threshold required for an inclusion as full siblings, a finding of inconclusive is reported regarding the question of a sibling relationship.
8XX7ZA-5875	Combined full sibship ratios less than 0.1 is considered genetic evidence not supporting the tested relationship.
BTBQX7-5875	The analysis of the provided DNA profiles across multiple STR loci yielded a cumulative kinship index of 0.002352. A kinship index significantly lower than 1.0 indicates that the genetic evidence does not support the hypothesis of a full sibling relationship between the two individuals tested. Therefore, based on the evaluated loci and allele frequencies, the genetic data are more consistent with the two individuals being unrelated rather than full siblings. No further kinship calculations were deemed necessary given the low cumulative likelihood ratio obtained.
CGE3AV-5875	The reported values are Kinship Index (KI) values calculated using Kin CALc v6.0 BFS software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a $1/k$ prior instead of x/N . Due to possible genetic linkage between the vWA and D12S391 loci, the genotypes from only one of these loci were used to calculate the combined KI that is reported. Per laboratory practice, only the GlobalFiler loci are used for the KI calculations, hence no KI's were reported for the Penta D and Penta E loci.

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
J6WQYK-5870	The kinship index does not support the hypothesis that Profile B is the full sibling of Profile A.
JLHCGP-5870	There is strong evidence to indicate that the subject A and B are not full-siblings.
KK7XKV-5870	Based on the provided genetic profile data for "A" and "B" and the manually performed statistical calculations, a Kinship Index (KI) of 0.00001235 was obtained. This value indicates that the hypothesis of full siblinghood is negative, as the probability of the individuals sharing the observed number of alleles under this hypothesis is significantly lower compared to the probability that they are unrelated individuals.
L6A4MU-5875	Based on the genetic tests of the analyzed samples and considering two hypotheses: H1 - donors of the analyzed samples have the same mother and father; H2 - donors of the analyzed samples have different parents, it can be concluded that the probability of confirming hypothesis H1 is 0.0000011014%. The LR result for hypothesis H1 is 0.0000011014, which indicates the rejection of hypothesis H1 as true. The results of the calculations performed exclude the possibility of kinship in the full sibling relationship through a common father and mother.
L7K69T-5875	Hypothesis 1: Person A and B are Caucasian Full Sibling. Hypothesis 2: Person A and B are unrelated. The likelihood ratio (LR) indicate how many times more likely it is to obtain evidence (DNA profile agreement) assuming that the hypothesis 1 is true, than if the alternative hypothesis 2 is true. Likelihood Ratio equal 1.2353E-0.6. Probability of kinship for Hypothesis 1 equals: 0,00012353%. Probability of unrelated for Hypothesis 2 equals: 99.9998765 %. The obtained LR value supports the Hypothesis 2 (they are unrelated) very strongly in relation to the Hypothesis 1.
LPXMFT-5870	The laboratory's procedure for genetically linked loci D12S391 and vWA in non-parentage cases requires that if no allele is shared in one of the systems, then the LR for that locus must be reported and the other reported as 1.00 or left blank. In this case, the D12S391 LR of 1.558 would be made 1.000 and a CLR of 0.0000007931 reported.
U6H6NL-5870	The likelihood ratio between Huma's two DNA profiles was estimated; however, the genetic evidence is insufficient to establish a firm relationship. Additional genetic data, such as autosomal profiles, as well as other direct relatives, are needed.
U922JB-5870	D12S391 is omitted from calculations, as per laboratory policy. Individual locus likelihood ratios were rounded to 4 significant figures to mimic example provided. The Combined Kinship Index is truncated to 2 significant figures, as per laboratory policy.
UH9ZTD-5875	* The likelihood ratios were calculated with the KinCALC software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k instead of x/N. The KinCALC software uses the NIST STRBase Population Database. The locus D12S391 was omitted due to linkage with VWA. Also we do not test PentaD and PentaE in our laboratory so those loci were not evaluated. The individuals were reported to be Caucasian; therefore only values for Caucasian were reported.
YCLKQA-5875	The chance of generating a false negative with a CRI of less than 0.1 is less than 1.88%. Locus vWA was ignored due to linkage with locus D12S391 and was excluded from these calculations.
YMM6T3-5870	It is greater than 810 000 times more likely to obtain these profiles if they originate from two unrelated individuals, rather than if they originate from full biological siblings
YRF3DE-5870	The donor of A is not the biological sibling to the donor of B.
ZT8MM6-5870	Per laboratory protocol, if a sibling KI does not meet or exceed 33. the relationship is reported as Inconclusive.

Additional Comments

TABLE 9

WebCode-Test	Additional Comments
2CXXA4-5870	Parts I and II [Tables 1 - 5]: The Combined Paternity Index value is truncated to 2 significant figures, per Department policy. The Probability of Paternity is truncated to 4 places past the decimal, per Department policy. Part III [Tables 6 - 7]: The Combined Kinship Index included all loci provided (excluding D12S391) and was truncated to 2 significant figures, per Department policy.
3KN2Q7-5870	1) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 3" is the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 2) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 4" is not the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 3) Extraction: -Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4) Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. - Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5) Electrophoresis: -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6) Quality Control: -Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7) The statistical formula were derived from DNView Statistical Software and calculated using Microsoft Excel. NM: denotes non-male profile
3PGZ62-5870	For Part II: PATERNITY DNA STATISTICS 2c. Record the Probability of Paternity [Table 5: Paternity DNA Statistics & Conclusions]: The value I intended to enter was >99.9999999999, based on the Parentage Trio Calculations I performed using the Popstats Expanded FBI STR 2015 Database, but the field would not allow me to enter the symbol > although it previously had in the past. The value was recorded as 99.9999999999 instead.
3UU2WD-5870	STATISTICAL CALCULATIONS DETERMINED WITH IDENTIFILER PLUS LOCI, SINCE THE LABORATORY STATISTICAL CALCULATION HAS NOT BEEN CONFIGURED FOR GLOBALFILER LOCI.
3V97VC-5875	NR = No Results. PI, Combined Paternity Index, and Probability of Paternity calculations were not performed due to [Laboratory] calculating likelihood ratios for paternity and kinship analyses utilizing a laboratory specific database and the DBLR software. The likelihood ratio obtained for Alleged Father A = 100 Billion supporting the conclusion that Alleged Father A is the biological father of the child. The likelihood ratio obtained for Alleged Father B = 1/LR = 1.7 duodecillion (Exclusion), supporting the conclusion that Alleged Father B is excluded as the biological father of the child.
63XV4B-5870	For paternity testing, DNView software was used to calculate LR _s , which was reported as the Combined Paternity Index value. The probability of paternity is not a DNView output statistic. Individual locus PIs were not reported for Item 4 as DNView software was used as a screening method and excluded Item 4 as the father. Under the Item 3 tab, "N/A" was reported for D12S391 PI since it is linked with vWA for all calculations.
698T34-5870	Extraction: Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. Amplification: Item 1, Item 2, Item 3 and Item 4 were amplified using GlobalFiler Express PCR Amplification kit on 9700 GeneAmp PCR System. Item 3 and Item 4 were amplified using AmFISTR Y-Filer kit on 9700 GeneAmp PCR System. Electrophoresis: Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (GlobalFiler Express). Electrophoresis for Y-Filer was carried out on Genetic Analyzer 3500xl for Item 3 and Item 4. Quality Control: Reagent blank, Positive Control and Negative Control were carried out through analysis and all gave intended results. Abbreviation: NM: Non-male Profile.

TABLE 9

WebCode-Test	Additional Comments
6JHL3B-5870	Statistical calculations determined with ID plus loci as the laboratory statistical calculator has not yet been configured for global filer
6PRJ34-5870	1. On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 3" is the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 2. On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 4" is not the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 3. Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4. Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. -Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5. Electrophoresis: -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6. Quality Control: -Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7. The statistical formula was derived from DNView Statistical Software and calculated using Microsoft Excel. Remark: 'NM' denotes non-male profile.
7CFUA8-5870	Amplification: Using the in-situ method, Item 1, Item 2, Item 3 and Item 4 were amplified using the Applied Biosystems™ GlobalFiler™ Express PCR Amplification Kit on the Applied Biosystems™ ProFlex™ 96-well PCR System. Item 3 and Item 4 were also amplified using the AmpFLSTR™ Yfiler™ PCR Amplification Kit on the Applied Biosystems™ GeneAmp PCR System 9700. Electrophoresis: Electrophoresis was carried out on the Applied Biosystems™ 3500xL Genetic Analyzer and the data were analyzed with the Applied Biosystems™ GeneMapper ID-X v1.5 software. Quality control: Reagent Blank, Positive Control and Negative Control were included throughout the analysis and all gave intended results. Statistical Evaluation: The statistical formulas were derived from the DNA•VIEW Statistical Software and the paternity/ kinship index was calculated using Microsoft Office Excel. On comparison of the DNA profiles obtained, I found the following: a) The donor of bloodstained specimen "Item 3" to be the biological father to the donor of bloodstained specimen "Item 2". b) The donor of bloodstained specimen "Item 4" is excluded from being the biological father to the donor of bloodstained specimen "Item 2". (Given that the biological mother is represented by the donor of bloodstained specimen "Item 1"). Remark: 'NM' denotes non-male profile.
7FYP6X-5870	No PI statistics added for item 4 as this individual was excluded. No statistics are calculated per laboratory protocol for individuals that are excluded. Part II - 2c. [Table 5: Paternity DNA Statistics & Conclusions]: The probability of paternity was given as >99.999999999, but the result written in the data entry box on the CTS portal would not allow the ">" symbol to be entered.
7KUJ3Y-5870	The Combined Paternity Index is truncated to 2 significant figures per lab protocol. The Probability of Paternity is truncated to 4 places past the decimal per lab protocol.
8JH69X-5870	Parts I and II [Tables 1 - 5]: Our laboratory does not calculate a likelihood ratio for exclusions. D12S391 is omitted from the calculation, per laboratory policy. One population database ethnicity was chosen. Individual locus PIs were rounded and three significant figures were reported, per laboratory instructions. Per laboratory policy, combined PI was calculated in POPSTATS using actual (unrounded) individual locus PIs and two significant figures were reported. The Probability of Paternity is expressed as a percentage. Part III [Tables 6 - 7]: The individual locus LR's were rounded and four significant figures were reported, per laboratory instructions. D12S391 is omitted from the overall kinship index, per laboratory policy. Two significant figures were reported for combined kinship index, per laboratory policy.
9FABY7-5875	SE33 not used for statistics in laboratory procedure
9GKCL6-5870	[Laboratory] is not currently online with kinship statistics.

TABLE 9

WebCode-Test	Additional Comments
A73WLW-5870	* Per agency policy, D12S391 is not used for PI calculations due to potential linkage with vWA. * Per case information and agency policy, Caucasian PI values are reported here.
AXP6VX-5870	1. On comparison to the DNA profile obtained, I found that the source of bloodstain specimen "Item 3" is the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 2. On comparison to the DNA profile obtained, I found that the source of bloodstain specimen "Item 4" is NOT the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 3. Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4. Amplification: - Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. - Item 3 and Item 4 were further amplified using AmpFLSTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5. Electrophoresis: - Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). - Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6. Quality Control: - Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7. The statistical formula was derived from DNView Statistical Software and calculated using Microsoft Excel. Remark: 'NM' denotes non-male profile.
BNWBXR-5870	Per this laboratory's procedure: The CPI was calculated omitting D12S391 due to vWA/D12S391 linkage disequilibrium. The PI and CPI are from the Population Group that had the lowest CPI. The CPI was truncated. Probability of Paternity is not reported. No PI calculations are made when an alleged father is excluded as the biological father.
CE7QTU-5870	Per laboratory policy, D12S391 genetic locus not used for statistical analysis and combined index value truncated to two significant figures.
CGE3AV-5875	For Part I - PI values at specific loci, Part II - Combined PI value, and Part III - Kinship DNA Statistics [Tables 1 - 7]: the reported values are Kinship Index (KI) values calculated using Kln CALc v6.0 BFS software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of x/N. Due to possible genetic linkage between the vWA and D12S391 loci, the genotypes from only one of these loci were used to calculate the combined KI that is reported. For Part II [Table 5: Paternity DNA Statistics & Conclusions]: our laboratory does not report Probabilities of Paternity.
DB66B3-5870	NR = No Results
DJXGDV-5870	1. Amplification: Amplification of STR (Short Tandem Repeat) Genetic Loci was carried out on Item 1, Item 2, Item 3 and Item 4 using Globalfiler Express PCR Amplification Kit on the Proflex 3x32-well PCR System. Amplification of Y-STR (Short Tandem Repeat) Genetic Loci was carried out on Item 3 and Item 4 using the AmpF STR Y-Filer PCR Amplification Kit on the Proflex 3x32-well PCR System. 2. Electrophoresis: Electrophoresis was carried out using Applied Biosystem 3500 xL Genetic Analyzer with GeneMapper ID-X Software for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). Electrophoresis for Y-Filer was carried out on the Applied Biosystem 3500xL with GeneMapper ID-X Software for Item 3 and Item 4. 3. Reagent blank, Positive Control and Negative Control were carried out throughout the analysis and all gave the intended results. 4. NM = Non Male profile. 5. NA = Not Applicable.

TABLE 9

WebCode-Test	Additional Comments
DK8JZU-5870	1) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 3" is the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 2) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 4" is not the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 3) Extraction: -Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4) Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. - Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5) Electrophoresis: -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6) Quality Control: -Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7) The statistical formula were derived from DNView Statistical Software and calculated using Microsoft Excel. NM: denotes non-male profile
DTKEC4-5870	The individual completing the proficiency test is not qualified in statistical calculations, thus no statistical calculations have been provided for assessment.
E9X8FZ-5875	SE33 locus not used in paternity statistics calculations at the [Laboratory]
F7LRLY-5875	SE33 was not utilized for statistics as per laboratory policy.
F9NRNP-5870	PI is not calculated when an individual is excluded as the biological father. The laboratory protocol is not to include the D12S391 locus for paternity calculations. The laboratory does not calculate kinship statistics for Y-STR results; therefore, Y-STR analysis was not performed in the proficiency test (child is also female). When profiling Item 4 with the Globalfiler Kit, the D13 locus 13 allele had a greater than expected n+4 stutter product (8% peak height to the 13 allele). Given the heights of the 11 and 13 alleles detected at the locus, the observed peak height for the peak in the n+4 stutter position was lower than what would be expected for a typical tri-allele pattern. Per STRbase, a 11, 13, 14 tri-allele has not been observed with the Globalfiler Kit at this time. Additionally, the DNA profile obtained from Item 4 had no other indication of more than one contributor. As a result, the peak in the n+4 stutter position was deemed to be an elevated n+4 stutter artifact and was not reported.
FR2BKT-5870	DYS391 is reported as INC for the PowerPlex Fusion System as per laboratory policy.
G3HDDZ-5875	A) Participation in Test No. 25-5875: DNA Parentage. Part I [Table 1: STR Amplification Kit(s) & Results]: DNA Analysis for Item 1; Autosomal STR. Part I: DNA Analysis for Item 2; Autosomal STR. Part I: DNA Analysis for Item 3; Autosomal STR. Part I: DNA Analysis for Item 4; Autosomal STR. Part II: PATERNITY DNA STATISTICS [Table 5: Paternity DNA Statistics & Conclusions]: B) No Participation in Kinship DNA Analysis. Part III [Table 6 - 8]: KINSHIP DNA STATISTICS--no participation.
HJ2Q4X-5870	"NR" = "No Results"
HMY9AP-5870	Part I [Tables 1 - 4]: 1) The laboratory does not use D12S391 for paternity / kinship DNA statistics. 2) The laboratory excludes the alleged parent as biological parent of the child when there are ≥ 3 loci with genetic inconsistencies; the PI is not calculated. Part II [Table 5]: 1) The laboratory uses the all-ethnicities dataset (n=1036) for paternity DNA statistics. 2) The laboratory generally reports the combined paternity index value to 2 significant figures. 3) The laboratory uses a prior probability of 0.5 to calculate the Probability of Paternity. Part III [Tables 6 - 7]: 1) The laboratory does not use D12S391 for paternity / kinship DNA statistics.

TABLE 9

WebCode-Test	Additional Comments
J6WQYK-5870	The results in part 2b [Table 5: Paternity DNA Statistics & Conclusions] were truncated following laboratory reporting guidelines. The result in part 2c [Table 5: Paternity DNA Statistics & Conclusions] was >99.999999999; however, ">" is not an accepted character in the results field. No PI statistics added for item 4 as this individual was excluded. No statistics are calculated per laboratory protocol for individuals that are excluded.
JA9ZWV-5870	It's necessary to have reference samples from direct line relatives -mother, father, child- for additional studies.
JEMEUM-5870	Reported Caucasian PI and Probability for Item 3. Per SOP, locus D12S391 is not included in calculations. No PI values were reported for item 4 since item 4 was excluded as possible biological father.
JLHCGP-5870	1) On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 3" is the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 2) On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 4" is not the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 3) Extraction: Item 1, Item 2, Item 3, and Item 4 were punched using 1.2 mm size puncher and the FTA disc was subjected for direct amplification. 4) Amplification: Item 1, Item 2, Item 3, and Item 4 were amplified using GlobalFiler Express PCR Amplification Kit on Applied Biosystem Proflex PCR system. Item 3 and Item 4 were further amplified using AmpFLSTR Y-Filer PCR Amplification Kit on Applied Biosystem Proflex PCR system. 5) Electrophoresis: Electrophoresis was carried out using Genetic Analyzer 3500 for all amplified products of GlobalFiler Express and Y-Filer Amplification Kit. 6) Quality Control: Reagent Blank, Positive Control, and Negative Control were incorporated in the overall analysis and gave expected results. 7) The statistical formulas were derived from DNAVIEW statistical software and calculated using Microsoft Excel. 8) NM: Non-male profile.
JW4FPP-5870	1. On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 3" is the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 2. On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 4" is NOT the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 3. Extraction Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4. Amplification -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. -Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5. Electrophoresis -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6. Quality Control -Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7. The statistical formula was derived from DNAView Statistical Software and calculated using Microsoft Excel. NM: denotes non-male profile

TABLE 9

WebCode-Test	Additional Comments
KBJ2LN-5870	1. On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 3" is the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 2. On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 4" is NOT the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 3. Extraction Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4. Amplification -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. -Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5. Electrophoresis -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6. Quality Control -Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7. The statistical formula was derived from DNView Statistical Software and calculated using Microsoft Excel. NM: denotes non-male profile
KK7XKV-5870	The allele frequencies for the Caucasian population from NIST 2017, included in the CODIS Database version 9.0.28.280, were used for the "Parentage" tool.
L2Q8PG-5870	The analysis was completed per the laboratory procedures. The CPI was calculated omitting VWA due to the vWA/D12S391 disequilibrium. The PI and CPI are from the population group with the lowest CPI. The CPI was truncated and the Probability of Paternity was not reported. The PI is not calculated when an alleged father is excluded as the biological father.
LEEB3U-5870	For paternity testing, the DNView software was used to calculate LR _s , which was reported as the Combined Paternity Index value. The probability of paternity is not a DNView output statistic. The NIST Caucasian population was used for LR calculations. Individual locus PIs were not reported for Item 4 as DNA Software was used as a screening method and excluded Item 4 as the possible father. Under the Item 3 tab, "N/A" was recorded for locus D12S391's PI because it is linked with vWA for all calculations.
MHEHCJ-5870	Locus D12S391 not utilized for statistics due to linkage with vWA.
NTTVYT-5875	Our forensic DNA laboratory conducts kinship analyses, including paternity analyses, using the Converge Software from Thermofisher. With this software, the relationship is determined based on hypotheses: the null hypothesis that they have a relationship and the alternate hypothesis that they do not have a relationship. Hence, the results are based on likelihood ratios, and not paternity index (PI). Therefore we do not provide PI, Combined Paternity Index or Probability of Paternity results.
PQW4AD-5870	Y-STR DNA analysis was not undertaken for both Alleged Father A and Alleged father B as the child is female, as per our laboratory practice. This testing is considered uninformative in relation to the paternity of the female child. The Paternity Index (PI) calculations model for mutations and linkage, using an $F_{st} = 0.01$. Our laboratory does not calculate the Probability of Paternity. Alleged Father B lacks the obligate paternal allele at 16/21 loci examined. This far exceeds our laboratories procedure of excluding a person from parentage who has three or more inconsistencies with a child. [calculated CPI = 2.39277E-40]. Part III [Table 6 and 7] (Kinship DNA statistics) was not undertaken as it is not applicable to our laboratory.
PT2RJN-5875	[Laboratory] is not currently online with kinship statistics.

WebCode-Test	Additional Comments
Q6DFZD-5870	For item 4 (alleged father B) - D13 has a detected peak in the 14 allele position which has been marked as inconclusive as being either extremely elevated forward stutter (7-12% based on amp) or a potential imbalanced tri-allele. Since this peak is inconclusive it has been removed from the allele table for item 4. These samples produced lower than expected results for a blood sample on FTA and 2 of them failed through our Fusion 6C direct amplification process for being too low and missing data. It appears there is something problematic with these samples as a sufficient sample was taken and blood on FTA is typically fairly consistent as far as DNA yield in this process. When entering the combined parentage index into the results form it would not allow text in the field to type in the word "trillion" which would have made the stat reporting easier, less prone to errors in entering zeros, and consistent with how we report our stats. Previously, I have been able to enter a number name with these tests. This should be updated back to allow this instead of having to enter a very large number into the field and risk mis-typing it.
QVMUUE-5870	Paternity indices, combined paternity index, and probability of paternity were reported using the Caucasian population values based on information provided in the test scenario. Genetic locus D12S391 was not used for paternity index calculations per laboratory's standard operating procedures. Paternity index calculations were not generated for item 4 due to exclusion as biological father.
QYM7QE-5870	Reported Caucasian PI and Probability for Item 3. Per SOP, locus D12S391 is not included in calculations. No PI values reported for item 4 since excluded as possible father.
TVVMVM-5870	NR = No Result
U6H6NL-5870	Statistical calculations are included independently of the Part II: PATERNITY DNA STATISTICS [Tables 6 - 7]: Autosomic LR=1326000000000000; LR(x)=66180000. Combined LR=87754680000000000000000000; W=99.999999999999999998.
U87JHA-5870	Direct exclusion for Alleged Father B without statistical calculations (per policy). For Item 4 -- possible high n+4 stutter (14) was observed at D13S317 at 5.41% and removed as possible high stutter from the profile.
U922JB-5870	D12S391 is omitted from calculations, as per laboratory policy. The CPI is truncated to 2 significant figures, as per laboratory policy. PI values reported as provided from calculations using the NIST 1036 U.S. Population Dataset were rounded to 3 significant figures to mimic example provided. Probability of paternity truncated at 4 digits past the decimal point, as per laboratory policy.
UH9ZTD-5875	The paternity indexes were calculated with the KinCALC software that uses standard formulae for simple PI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and 1/k instead of just x/N. The KinCALC software uses the NIST STRBase Population Database. The locus VWA was omitted due to linkage with D12S391. The Individuals were reported to be Caucasian; therefore only values for Caucasian were reported.
URWU6A-5875	Our laboratory does not calculate a Paternity Index. Per our SOP, we identify obligate alleles which are used to calculate a "Random Man Not Excluded" (RMNE) statistic. For this case, the obligate alleles were as follows: D3 (14), vWA (18), D16 (12), CSF (12), TPOX (8), D8 (15), D21 (30), D18 (18), D2S441 (14), D19 (12), TH01 (7), FGA (26), D22 (15), D5 (13), D13 (9), D7 (8 or 10), SE33 (22), D10 (14), D1 (12 or 16), D12 (18), and D2S1338 (21). RMNE report statement: The expected frequency of individuals who could be the father of Known child (Caucasian Daughter) is less than 1 in 880 billion in the general male population. NR = No Results. NT = Not Tested.
UYQYYB-5875	CPI value calculated using African American database.
XYHV7H-5870	[Laboratory] does not perform Kinship DNA

TABLE 9

WebCode-Test	Additional Comments
Y4AJ3F-5875	INDIVISAUL PI OF ITEM3 CALCULATED MANUALLY USING [Location Identifying Database]. COMBINED PI GENERATED BY DNA VIEW USING CAUCASIAN DATA AVAILABLE IN THE SOFTWARE.
Y6QEXA-5870	Using our rapid DNA system, ANDE, Part III [Tables 6 - 7] is not applicable to our laboratory.
Y8TFX7-5870	The laboratory does not report probability of paternity. Only the combined parentage index is reported. No other population groups are included. No statistics are calculated for evidence samples that only have individuals excluded as a parent. For calculation of CPI, vWA was left out of stats due to possible linkage with D12. Statistics/comparison can be performed for paternity only; no other relationship comparisons can be performed by the lab.
YFLPDH-5875	We did not fill out the Kinship DNA Statistics section which is not applicable in our laboratory.
YLDV27-5870	For item 4, at D13 a detected '14' peak was marked as inconclusive for being potentially high forward stutter (~9%) or a tri-allele and was not included in the allele table.
YRF3DE-5870	Amplification: Item 1 to Item 4 were amplified using GlobalFiler Express Kit on the 9700 GeneAmp PCR system. Item 3 and Item 4 were amplified using AmpFLSTR Yfiler Kit on the 9700 GeneAmp PCR System. Electrophoresis: The electrophoresis process was carried out by Genetic Analyzer 3500xl for Item 1 to Item 4. Quality Control: Reagent blank, positive control, and negative control were carried out along with the analysis and all gave the intended results. *NM denotes non male profile.
ZT8MM6-5870	D12S391 is omitted from the paternity calculation and from the kinship calculation (sibling), per laboratory protocol. The Combined Paternity Index is truncated to 2 significant figures, per laboratory protocol. The Probability of Paternity is truncated to 4 places past the decimal, per laboratory protocol. Per laboratory protocol, if a sibling KI does not meet a threshold of 33, the support for the relationship is reported as inconclusive.

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 25-5870: DNA Parentage

DATA MUST BE SUBMITTED BY **April 21, 2025, 11:59 p.m. EDT** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: ADGZ8P

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

Scenario:

A paternity case has been presented to your laboratory. Blood standards have been collected from the mother, daughter, and two alleged fathers. Your laboratory is tasked with examining the blood standards and comparing the DNA profiles.

Items Submitted (Sample Pack DPF1 - FTA™ Micro Cards):

Item 1: Blood Sample from Known Parent (Caucasian Mother)

Item 2: Blood Sample from Known Child (Caucasian Daughter)

Item 3: Blood Sample from Alleged Father A (Caucasian)

Item 4: Blood Sample from Alleged Father B (Caucasian)

DNA REPORTING INSTRUCTIONS

Use the instructions below to complete the following DNA Analysis sections of this data sheet

- Report alleles in numerical order, separated by a comma.
- Follow your laboratory procedures for reporting homozygotes (i.e. "14,14", "14,-", "14") and null responses
- PI = Paternity Index
- If your laboratory does not produce PI calculations, record your explanation within the Part IV: Additional comments section.

Example	D1S1656	D2S1338	D2S441	D3S1358	D5S818
STR	15,18	12,17	10	14	5,13
PI	1.65	3.01	3.16	4.12	5.65

Part I: DNA Analysis for Item 1

STR Amplification Kit(s) Used:

Please check all the brands that apply for this item and record only additional kit specific information in the blank provided (i.e. 16, Plus, Direct, HS, Fusion, etc.).

☐ Identifiler®

☐ GlobalFiler™

☐ Investigator® 24plex

☐ PowerPlex®

Other

Report the Paternity Software used (if applicable):

Alleles below are sorted in Default order.

ITEM	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
1						
ITEM	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
1						
ITEM	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
1						
ITEM	FGA	Penta D	Penta E	SE33	TH01	TPOX
1						
ITEM	vWA	DYS391	DYS570	DYS576	Y Indel	
1						

Part I (continued): DNA Analysis for Item 2

STR Amplification Kit(s) Used:

Please check all the brands that apply for this item and record only additional kit specific information in the blank provided (i.e. 16, Plus, Direct, HS, Fusion, etc.).

☐ Identifiler®

☐ GlobalFiler™

☐ Investigator® 24plex

☐ PowerPlex®

Other

Report the Paternity Software used (if applicable):

Alleles below are sorted in Default order.

ITEM	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
2						
ITEM	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
2						
ITEM	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
2						
ITEM	FGA	Penta D	Penta E	SE33	TH01	TPOX
2						
ITEM	vWA	DYS391	DYS570	DYS576	Y Indel	
2						

Part I (continued): DNA Analysis - Additional DNA

- Use this section to report results for loci not currently listed in other sections of the data sheet.
- Report alleles in numerical order, separated by a comma.
- Click "Add Row" to show another row of boxes for entry.

Locus	Item 1	Item 2	Item 3 Alleles	Item 3 PI	Item 4 Alleles	Item 4 PI

Part II: PATERNITY DNA STATISTICS

1. Which alleged father cannot be excluded as the biological parent of the child (Item 2)?
 - ☐ Item 3 - Alleged Father A
 - ☐ Item 4 - Alleged Father B
 - ☐ Neither - Both alleged fathers are excluded as being the biological parent of the child.
2. If applicable, calculate the Combined Paternity Index and the Probability of Paternity. For data submission purposes, CTS requests that you use the population database typically utilized in casework at your agency (e.g., FBI Popstats or NIST-STRBASE). If you are unable to use either of these databases, please indicate the other population database used.
 - 2a. Choose a Population Database:
 - ☐ FBI Popstats Population Database
 - ☐ NIST-STRBASE Population Database

(Access this publicly available U.S. population data set at [STRBASE](#). From there, select the hyperlink labeled "Revised allele frequencies file" under the title "Additional Information".)

Other Population Database:
 - 2b. Record the Combined Paternity Index value:
 - 2c. Record the Probability of Paternity:

Part III: KINSHIP DNA STATISTICS

Complete the following Kinship DNA Statistics section, **if applicable to your laboratory**, using the instructions below.

- Use the provided scenario for context.
- Use the supplied allele frequencies for calculations (adopted from the NIST STRBASE database).
- Only test the relationship in question (eg. half siblings versus unrelated).
- Complete the entire table including the formula used in the calculation and the allele legend.
- Report a minimum of four significant figures in your likelihood ratio values.

Example: Questioned Half Sibling Relationship

Locus	Profile A	Profile B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
FGA	18, 26	18, 26	18: 0.0249	26: 0.0263	$(p+q+4pq) / 8pq$	p = 18 q = 26	10.27
vWA	14, 15	14, 17	14: 0.0928	15: 0.1053	$(1+4p)/8p$	p = 14	1.847
			17: 0.1053				

Scenario:

The two DNA profiles below are presented as a potential Caucasian Full Sibling relationship between two females. Using the allele frequencies shown for the tested loci, calculate the likelihood ratio for support of the proposed relationship versus being unrelated.

Locus	A	B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
D1S1656	17,17.3	14,14	14: 0.0789	17: 0.0471			
			17.3: 0.1330				
D2S1338	17,18	16,23	16: 0.0374	17: 0.1856			
			18: 0.0734	23: 0.1053			
D2S441	10,10	11,15	10: 0.2105	11: 0.3435			
			15: 0.0596				
D3S1358	16,18	14,17	14: 0.1066	16: 0.2382			
			17: 0.2105	18: 0.1510			
D5S818	11,11	12,12	11: 0.3560	12: 0.3878			

Locus	A	B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
D7S820	10,11	9,11	9: 0.1676	10: 0.2562			
			11: 0.2050				
D8S1179	13,15	12,13	12: 0.1676	13: 0.3296			
			15: 0.1039				
D10S1248	15,16	13,13	13: 0.3075	15: 0.1967			
			16: 0.1330				
D12S391	20,22	21,22	20: 0.1108	21: 0.1288			
			22: 0.0956				
D13S317	12,13	12,12	12: 0.2687	13: 0.1163			
D16S539	10,12	11,12	10: 0.0568	11: 0.3144			
			12: 0.3144				
D18S51	15,17	16,17	15: 0.1704	16: 0.1468			
			17: 0.1385				
D19S433	12,14	13,14	12: 0.0706	13: 0.2548			
			14: 0.3615				
D21S11	28,32.2	29,32.2	28: 0.1593	29: 0.2022			
			32.2: 0.0900				
D22S1045	15,16	11,14	11: 0.1399	14: 0.0568			
			15: 0.3213	16: 0.3823			

Locus	A	B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
CSF1PO	12,12	11,12	11: 0.3089	12: 0.3601			
FGA	21,22	23,25	21: 0.1787	22: 0.2050			
			23: 0.1524	25: 0.0789			
PentaD	10,12	12,12	10: 0.1150	12: 0.2327			
PentaE	12,12	12,15	12: 0.1994	15: 0.0429			
SE33	12,13	14,17	12: 0.0069	13: 0.0166			
			14: 0.0249	17: 0.0623			
TH01	9.3,9.3	9.3,9.3	9.3: 0.3449				
TPOX	11,11	8,12	8: 0.5249	11: 0.2521			
			12: 0.0416				
vWA	14,21	18,19	14: 0.0928	18: 0.2022			
			19: 0.1039	21: 0.0014			

1. Evaluate the profiles above and record the kinship index.

2. Is the relationship of Caucasian Full Sibling supported by the genetic evidence?

3. Use the space provided to document any additional statistical results and relationship conclusions.

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

Part IV: ADDITIONAL COMMENTS
Comments regarding any part of this Test.

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

RELEASE OF DATA TO ACCREDITATION BODIES

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

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

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

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

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

ANAB Certificate No.

A2LA Certificate No.

Step 2: Complete the Laboratory Identifying Information in its entirety.

Authorized Contact Person and Title

Laboratory Name

Location (City/State)