Collaborative Testing Services, Inc
FORENSIC TESTING PROGRAM

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DNA Parentage Test No. 24-5872/7
Summary Report

Each participant received a sample set consisting of four blood samples representing a paternity case. Samples were collected from a mother, a son, and two potential fathers. Participants were asked to analyze the samples 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 Hispanic Full Sibling relationship claim was supported. Data were returned from 100 participants and are compiled into the following tables:

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

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

Manufacturer's Information

Each sample set consisted of known blood samples from four individuals (Items 1-4), a mother, a son, and two potential fathers, provided on either FTA™ Micro Cards or swabs. Participants were asked to analyze these items using their existing protocols. Also included with this test was a kinship exercise that consisted of autosomal DNA profiles from two individuals for comparison. Participants were asked to determine if a Hispanic Full Sibling relationship claim was supported following the review of these profiles.

SAMPLE PREPARATION: All items were prepared from human whole blood which was drawn into EDTA tubes. Each FTA™ Micro Card was spotted with 75 µL of blood, while each swab (two swabs per item) was spotted with 100 µL of blood. Item 1 was created from a female (mother) donor. Item 2 was created from a male (son) donor. Item 3 was created from a male donor who was the biological father of the Item 2 male, and Item 4 was created from a male donor who was not the biological father of the Item 2 male. The items were prepared at separate times and were packaged once they were thoroughly dried. Completed sample sets were stored at -20°C until shipment on August 19, 2024 following completion of the verification stage.

SAMPLE SET ASSEMBLY: For each sample set, all Items (1-4) of the same substrate type were packaged into separate envelopes and then placed together in a pre-labeled sample set envelope and sealed. The sealed sample set envelopes were then packaged in pre-labeled heat seal envelopes and sealed. This process was repeated until all of the sample sets were prepared.

KINSHIP EXERCISE: This exercise included allelic results representing a Hispanic Full Sibling relationship.

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 across both substrates.

Key to Test Substrates

5872 - FTA™ Micro Cards

5877 - Swabs

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	13,17.3	17,19	10,14	14,16	10,10	*
	12,13	11,13	14,14	20,21	11,12	9,13
	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20	NM	NM	NM	NM	
2	16,17.3	19,25	11.3,14	14,15	10,13	12,17
	8,12	11,13	14,15	20,23	8,12	11,13
	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19	2	
3	15,16	24,25	11.3,14	14,15	13,13	12,17
	8,10	11,11	15,16	18.3,23	8,11	11,11
	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19	2	
4	16,16.3	18,20	11,11	16,17	10,11	16,18
	8,12	10,15	16,17	23,24	11,14	12,12
	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20	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
2	36,37	14	11,15	13	29	24	10	13	13
	14	12	12	19	29	16	17	11	22
	39	12	12	17	19	22	23	9	12
3	36,37	14	11,15	13	29	24	10	13	13
	14	12	12	19	29	16	17	11	22
	39	12	12	17	19	22	23	9	12
4	36,38	16	11,14	13	31	25	10	11	13
	14	11	10	20	30	14	14	10	24
	41	12	12	20	20	17	23	10	12

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						
	2.8-5.39	4.31-5.97	2.97-11.3	1.58-2.29	6.01-7.43	*
	2.6-3.77	2.16-2.92	2.19-3.25	4.57-9.77	3.54-5.85	2.82-4.17
	1.88-4.52	1.24-1.63	2.98-5.08	1.19-1.73	-	5.37-8.1
	3.49-3.8	*	*	4.91-9.3	2.59-6.15	0.815-1.06
	3.75-5.74					
3PI - Grand Mean ± 3STD Range**						
	1.76-5.77	0.322-10.5	2.56-13.8	0.648-3.21	0-58.3	*
	1.63-5.08	0-8.92	1.81-3.37	0.739-14.5	0-9.31	1.44-5.34
	0.582-6.46	0.48-2.52	2.21-5.5	0.909-2.05	-	4-9.34
	0.0736-7.5	0.382-4.65	0-113	3.73-9.6	2.09-7.48	0-13.3
	0-17.6					
3PI - NIST-STRBASE						
	2.37-4.76	1.21-9.42	4.31-13.1	0.839-2.87	0-65.4	1.84-2.7
	1.8-5.15	0-9.28	1.69-3.36	0.579-15.6	0-11	1.17-5.46
	0.424-7.3	0.462-2.48	2.23-5	0.865-2.22	-	3.7-9.19
	0.0848-7.55	0.109-4.97	0-40.3	3.98-8.89	2.79-7.36	0.352-1.68
	0-14.8					
4PI - Grand Mean ± 3STD Range**						
	2.03-5.52	0-0.00683	0-0.0159	0-0.0587	0-0.00587	*
	2.38-4.28	0-0.103	0-0.00564	1.85-13.1	0-0.00511	0-0.0646
	0.899-6.25	0-0.044	0-0.156	0.743-2.17	-	0-0.312
	0-0.759	0-0.0229	0-0.0994	0-0.0238	0-0.0616	0.43-1.47
	0-8.24					

* 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 four known blood samples, along with the determination of paternity. Item 1 was created from a female (mother) donor. Item 2 was created from a male (son) donor. Item 3 was created from a male donor who was the biological father of the Item 2 male, and Item 4 was created from a male donor who was not the biological father of the Item 2 male. Participants were asked to analyze the items and provide allelic and statistical results, as well as relationship conclusions. The test also included a paper kinship exercise where participants were asked to evaluate provided DNA profiles and report the kinship index and conclusions for an alleged Hispanic Full Sibling relationship claim. Refer to the Manufacturer's Information for preparation details.

DNA Analysis

All participants were able to obtain full STR profiles from all four items. Consistent results were achieved by all participants, with the exception of five participants. For YSTR results, all participants were able to obtain full profiles and consistent results were achieved by all but one participant.

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

Fifty-three participants submitted a response for the paper kinship exercise concerning the Hispanic Full Sibling relationship claim. For the loci likelihood ratio data, seventeen participants reported extreme data in comparison to the calculated mode at one or more loci. A trend was not identified; however, these inconsistencies did not appear to affect the overall conclusions, as 96% of participants supported the relationship claim. Of the remaining participants, one did not support the relationship claim and one reported "Inconclusive."

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

22W96H-5872 Identifiler® Direct

		17,19		14,16	10,10	
	12,13	11,13			11,12	9,13
1	13,16	13,14	29,31.2		X,X	11,12
	21,21				7,9.3	8,8
	14,20					

28YEKK-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20	0			0	

2K6B22-5872 Investigator® 24plex

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

2QXD62-5872 GlobalFiler™ Express

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20	NM			NM	

2WZGXK-5877 GlobalFiler™ EXPRESS

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

32CRNU-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

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

36PRKL-5877 GlobalFiler™ (Combined Familias ver. 3.3.1)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

3B2FKH-5872 GlobalFiler™ (eDNA)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

3CU9F2-5872 Investigator® 24plex

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

3EZU7L-5877 GlobalFiler™ (Familias, version 3.1.9.3)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

3G223J-5877 PowerPlex® Fusion6c (Familias v3.3.1)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20					

496J9T-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

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

4LRTVY-5872 PowerPlex® FUSION, PowerPlex 21, PowerPlexESX17 and PowerPlex CS7

	13,17.3	17,19	10,14	14,16	10	11,17
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20					

64TV9W-5877 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20	No Results			No Results	

68T76W-5877 GlobalFiler™ (KInCALc)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20	No Results			No Results	

693BHK-5872 VersaPlex 27PY

	13,17.3	17,19	10,14	14,16	10	11,17
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

6P9F6X-5872 PowerPlex® Fusion 5C

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

6VDCQH-5872 PowerPlex® Fusion, iPLEXSTR

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20					

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

73CYGW-5872 PowerPlex® Fusion (Popstats)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

77QVNJ-5872 PowerPlex® Fusion 6C

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20					

7BLMUV-5872 PowerPlex® CS7, 21, GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	11,17
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20					

7YU2QL-5877 GenePrint 24 (In-house Software)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

8D9NCN-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20	NR			NR	

93MK6P-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

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

9D2WXD-5872 PowerPlex®

	13,17.3	17,19	10,14	14,16	10,10	-
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20	-	-	-	-	

9N7PPT-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

ACKZ7D-5877 GlobalFiler™ Express

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	-	-	22.2,25.2	7,9.3	8,8
	14,20	-	-	-	-	

AG28UD-5877 PowerPlex® Fusion 6C (eDNA version 3.2.0.0 2017-03-13)

	13,17.3	17,19	10,14	14,16	10	Not Tested
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20	No Results	No Results	No Results	Not Tested	

AM82LN-5872 GlobalFiler™ (DBLR)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

AQM9AM-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

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

AU6Q6D-5877 PowerPlex® 6C

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20	NR	NR	NR		

C3AGKL-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

CFHZJF-5877 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

CMHKJQ-5877 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20	no result			no result	

CNUJFK-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

DEJGUJ-5872 PowerPlex® F6C (PopStats)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20					

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

DH6229-5877 GlobalFiler™ (FBI Popstats)						
	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					
DV6ZP7-5877 GlobalFiler™						
	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					
EF96PK-5872 GlobalFiler™						
	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					
EWGWRP-5872 GlobalFiler™						
	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20	Not Detected			Not Detected	
F8TL97-5872 GlobalFiler™ Express						
	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20	NM			NM	
FPCFWA-5872 Investigator ESSplex SE QS (Familias)						
	13,17.3	17,19	10,14	14,16		
		11,13	14,14	20,21		9,13
1	13,16	13,14	29,31.2	15,15	X,X	
	21,21			22.2,25.2	7,9.3	
	14,20					

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

FPTVPG-5872 PowerPlex® 21 (Kinship(in house application))

	13,17.3	17,19		14,16	10,10	11,17
	12,13	11,13		20,21	11,12	9,13
1	13,16	13,14	29,31.2		X,X	11,12
	21,21	9,10	9,11		7,9.3	8,8
	14,20					

FYHKM6-5872 GlobalFiler™ Express

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20	NM			NM	

GHNEU2-5872 PowerPlex® Fusion 5C (KIn CALc 5.0.12)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20	Inconclusive				

GM2WBJ-5872 PowerPlex® Fusion (POPSTATS)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

GNCYWH-5872 PowerPlex® Fusion

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

GREW8B-5872 GlobalFiler™ (Genoproof 3.0.7)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

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

GZPYTB-5872 PowerPlex® FUSION 5C (M-FISys 11.09)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11		7,9.3	8,8
	14,20					

H6EVV8-5872 PowerPlex® Fusion

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20	NR				

H87UA6-5877 GlobalFiler™ Express

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

HJFUJ4-5872 PowerPlex® 24 fusion

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11		7,9.3	8,8
	14,20					

HWLNBG-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

J3K7KQ-5877 Investigator® 24plex, MainstAY Verogen (Familias)

	13,17.3	17,19	10,14	14,16	10,10	11,17
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20	-				

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

JA7P7D-5872 PowerPlex® Fusion 5C

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

JDRAD3-5877 GlobalFiler™ (PopStats)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

JK6HE6-5877 PowerPlex® 6c

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20					

JQG7E2-5877 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

JRAYAK-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20	--			--	

LRXAZ4-5872 PowerPlex® Fusion 6C, GlobalFiler™, NGM SElect

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20					

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

LU6RYY-5872 GlobalFiler™ Express

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20	NM			NM	

LUEBFM-5877 Investigator® 24plex (GeneMarker V 2.9.5)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20	/				

LUP9E2-5877 GlobalFiler™ Express

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

M2HZZZ-5877 GlobalFiler™ Express

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

MDDEXC-5872 PowerPlex® Fusion

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

MFPURD-5872 PowerPlex® Fusion

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

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

MJKHA7-5872 Identifiler® Plus (STRlab)

		17,19		14,16	10,10	
	12,13	11,13			11,12	9,13
1	13,16	13,14	29,31.2		X,X	11,12
	21,21				7,9.3	8,8
	14,20					

MK4AUM-5872 Investigator® 24plex, MainstAY Verogen (Familias)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20					

MM26J6-5872 PowerPlex® Fusion (Gene Analysen)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2		X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

MXJMCB-5877 GlobalFiler™ (Popstats)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

N2ZCBE-5877 GlobalFiler™ (Popstats)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20	ND			ND	

N9W7AC-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

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

NHLXV6-5872 PowerPlex® ESX17, PPHS16, HDPlex

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20					

NQE6GV-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

NZ7NV4-5872 PowerPlex® Fusion

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20	NR				

P3RPDX-5877 PowerPlex® Fusion 6C (KinCalc v 5.0.12 Beta)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20					

P4Y6K4-5872 PowerPlex® Fusion System

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21	9,10	9,11		7,9.3	8
	14,20	Not applicable				

Q2R9E6-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

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

QJ8HE7-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

RERAQ7-5872 PowerPlex® 21

	13,17.3	17,19		14,16	10,10	11,17
	12,13	11,13		20,21	11,12	9,13
1	13,16	13,14	29,31.2		X,X	11,12
	21,21	9,10	9,11		7,9.3	8,8
	14,20					

RKZQZV-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

RWC2Q7-5872 PowerPlex® 21 (Kinship)

	13,17.3	17,19		14,16	10,10	11,17
	12,13	11,13		20,21	11,12	9,13
1	13,16	13,14	29,31.2		X,X	11,12
	21,21	9,10	9,11		7,9.3	8,8
	14,20					

TAWX69-5872 PowerPlex® FUSION, GlobalFiler™, VERIFILER PLUS

	13,17.3	17,19	10,14	14,16	10	11,17
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20					

TCHHCX-5872 PowerPlex® FUSION 6C (M-FISYS)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11		7,9.3	8,8
	14,20					

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

VFV2AX-5877 PowerPlex® Fusion 5C (DNAView)

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

VLM9UR-5877 GlobalFiler™ (GeneMapper ID-X software v1.6)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

VVB37N-5872 PowerPlex® 6C (eDNA)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20					

W763VX-5872 PowerPlex® Fusion 6C (Familias v3.3.1 (using national allele frequencies))

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20					

W7LWW8-5872 Investigator® 24plex

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20	N/A				

WR449Z-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

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

WUBL8W-5872 PowerPlex® Fusion 6c (M-FISys)

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20	0	0	0		

XMTF94-5877 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20	no results			no results	

XR3TRN-5872 GlobalFiler™ Express

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20					

XYGF2R-5877 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	11,17
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11	22.2,25.2	7,9.3	8
	14,20					

XZTEV2-5872 PowerPlex® Fusion

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21	9,10	9,11		7,9.3	8
	14,20					

YETBUT-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20	NR			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

Z47XTZ-5872 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

ZGEE2Q-5872 PowerPlex® Fusion 6C

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21	9,10	9,11	22.2,25.2	7,9.3	8,8
	14,20	-	-	-		

ZPKJP2-5877 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10,10	
	12,13	11,13	14,14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15,15	X,X	11,12
	21,21			22.2,25.2	7,9.3	8,8
	14,20	no results			no results	

ZZ6PNQ-5877 GlobalFiler™

	13,17.3	17,19	10,14	14,16	10	
	12,13	11,13	14	20,21	11,12	9,13
1	13,16	13,14	29,31.2	15	X,X	11,12
	21			22.2,25.2	7,9.3	8
	14,20					

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

22W96H-5872 Identifiler® Direct

		19,25		14,15	10,13	
	8,12	11,13			8,12	11,13
2	13,14	14,14	29,30		X,Y	11,13
	21,24				7,8	8,8
	14,18					

28YEKK-5872 GlobalFiler™ (DNA View)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

2K6B22-5872 Investigator® 24plex

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10				

2QXD62-5872 GlobalFiler™ Express

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

2WZGXK-5877 GlobalFiler™ EXPRESS

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

32CRNU-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	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 2 - STR Results

36PRKL-5877 GlobalFiler™ (Combined Familias ver. 3.3.1)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

3B2FKH-5872 GlobalFiler™ (eDNA)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

3CU9F2-5872 Investigator® 24plex

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10				

3EZU7L-5877 GlobalFiler™ (Familias, version 3.1.9.3)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

3G223J-5877 PowerPlex® Fusion6C (Familias v3.3.1)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19		

496J9T-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	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 2 - STR Results

4LRTVY-5872 PowerPlex® FUSION, PPowerPlex 21, PowerPlexESX17 and PowerPlex CS7

	16,17.3	19,25	11.3,14	14,15	10,13	12,17
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	10				

64TV9W-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

68T76W-5877 GlobalFiler™ (KInCALc)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

693BHK-5872 VersaPlex 27PY

	16,17.3	19,25	11.3,14	14,15	10,13	12,17
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10	17	19		

6P9F6X-5872 PowerPlex® Fusion 5C

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

6VDCQH-5872 PowerPlex® Fusion, iPLEXSTR

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	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 2 - STR Results

73CYGW-5872 PowerPlex® Fusion (Popstats)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

77QVNJ-5872 PowerPlex® Fusion 6C

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19		

7BLMUV-5872 PowerPlex® CS7, 21, GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	12,17
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	10	17	19	2	

7YU2QL-5877 GenePrint 24 (In-house Software)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18					

8D9NCN-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

93MK6P-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	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 2 - STR Results

9D2WXD-5872 PowerPlex®

	16,17.3	19,25	11.3,14	14,15	10,13	-
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19	-	

9N7PPT-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

ACKZ7D-5877 GlobalFiler™ Express

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	-	-	19,22.2	7,8	8,8
	14,18	10	-	-	2	

AG28UD-5877 PowerPlex® Fusion 6C (eDNA version 3.2.0.0 2017-03-13)

	16,17.3	19,25	11.3,14	14,15	10,13	Not Tested
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	10	17	19	Not Tested	

AM82LN-5872 GlobalFiler™ (DBLR)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

AQM9AM-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	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 2 - STR Results

AU6Q6D-5877 PowerPlex® 6C

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	10	17	19		

C3AGKL-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

CFHZJF-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

CMHKJQ-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

CNUJFK-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

DEJGUJ-5872 PowerPlex® F6C (PopStats)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19		

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

DH6229-5877 GlobalFiler™ (FBI Popstats)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

DV6ZP7-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

EF96PK-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

EWGWRP-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

F8TL97-5872 GlobalFiler™ Express

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

FPCFWA-5872 Investigator ESSplex SE QS (Familias)

	16,17.3	19,25	11.3,14	14,15		
		11,13	14,15	20,23		11,13
2	13,14	14,14	29,30	15,15	X,Y	
	21,24			19,22.2	7,8	
	14,18					

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

FPTVPG-5872 PowerPlex® 21 (Kinship(in house application))

	16,17.3	19,25		14,15	10,13	12,17
	8,12	11,13		20,23	8,12	11,13
2	13,14	14,14	29,30		X,Y	11,13
	21,24	10,12	7,9		7,8	8,8
	14,18					

FYHKM6-5872 GlobalFiler™ Express

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

GHNEU2-5872 PowerPlex® Fusion 5C (KIn CALc 5.0.12)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	Inconclusive				

GM2WBJ-5872 PowerPlex® Fusion (POPSTATS)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

GNCYWH-5872 PowerPlex® Fusion

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

GREW8B-5872 GlobalFiler™ (Genoproof 3.0.7)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	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 2 - STR Results

GZPYTB-5872 PowerPlex® FUSION 5C (M-FISys 11.09)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9		7,8	8,8
	14,18	10				

H6EVV8-5872 PowerPlex® Fusion

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

H87UA6-5877 GlobalFiler™ Express

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

HJFUJ4-5872 PowerPlex® 24 fusion

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9		7,8	8,8
	14,18	10				

HWLNBG-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

J3K7KQ-5877 Investigator® 24plex, MainstAY Verogen (Familias)

	16,17.3	19,25	11.3,14	14,15	10,13	12,17
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	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 2 - STR Results

JA7P7D-5872 PowerPlex® Fusion 5C

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

JDRAD3-5877 GlobalFiler™ (PopStats)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

JK6HE6-5877 PowerPlex® 6c

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19		

JQG7E2-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

JRAYAK-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

LRXAZ4-5872 PowerPlex® Fusion 6C, GlobalFiler™, NGM SElect

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	10	17	19	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 2 - STR Results

LU6RYY-5872 GlobalFiler™ Express

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

LUEBFM-5877 Investigator® 24plex (GeneMarker V 2.9.5)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10				

LUP9E2-5877 GlobalFiler™ Express

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

M2HZZZ-5877 GlobalFiler™ Express

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

MDDEXC-5872 PowerPlex® Fusion

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

MFPURD-5872 PowerPlex® Fusion

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	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 2 - STR Results

MJKHA7-5872 Identifiler® Plus (STRlab)

		19,25		14,15	10,13	
	8,12	11,13			8,12	11,13
2	13,14	14,14	29,30		X,Y	11,13
	21,24				7,8	8,8
	14,18					

MK4AUM-5872 Investigator® 24plex, MainstAY Verogen (Familias)

	16,17.3	19,25	11.3,14	14,15	10,13	12,17
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10				

MM26J6-5872 PowerPlex® Fusion (Gene Analysen)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30		X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

MXJMCB-5877 GlobalFiler™ (Popstats)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

N2ZCBE-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

N9W7AC-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	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 2 - STR Results

NHLXV6-5872 PowerPlex® ESX17, PPHS16, HDPlex

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	10				

NQE6GV-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

NZ7NV4-5872 PowerPlex® Fusion

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

P3RPDX-5877 PowerPlex® Fusion 6C (KinCalc v 5.0.12 Beta)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	10	17	19		

P4Y6K4-5872 PowerPlex® Fusion System

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

Q2R9E6-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	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 2 - STR Results

QJ8HE7-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

RERAQ7-5872 PowerPlex® 21

	16,17.3	19,25		14,15	10,13	12,17
	8,12	11,13		20,23	8,12	11,13
2	13,14	14,14	29,30		X,Y	11,13
	21,24	10,12	7,9		7,8	8,8
	14,18					

RKZQZV-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

RWC2Q7-5872 PowerPlex® 21 (Kinship)

	16,17.3	19,25		14,15	10,13	12,17
	8,12	11,13		20,23	8,12	11,13
2	13,14	14,14	29,30		X,Y	11,13
	21,24	10,12	7,9		7,8	8,8
	14,18					

TAWX69-5872 PowerPlex® FUSION, GlobalFiler™, VERIFILER PLUS

	16,17.3	19,25	11.3,14	14,15	10,13	12,17
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	10	17	19	2	

TCHHCX-5872 PowerPlex® FUSION 6C (M-FISYS)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9		7,8	8,8
	14,18	10	17	19		

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

VFV2AX-5877 PowerPlex® Fusion 5C (DNAView)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

VLM9UR-5877 GlobalFiler™ (GeneMapper ID-X software v1.6)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

VVB37N-5872 PowerPlex® 6C (eDNA)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19		

W763VX-5872 PowerPlex® Fusion 6C (Familias v3.3.1 (using national allele frequencies))

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19		

W7LWW8-5872 Investigator® 24plex

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10				

WR449Z-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	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 2 - STR Results

WUBL8W-5872 PowerPlex® Fusion 6c (M-FISys)

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19		

XMTF94-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

XR3TRN-5872 GlobalFiler™ Express

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

XYGF2R-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	12,17
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8
	14,18	10			2	

XZTEV2-5872 PowerPlex® Fusion

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24	10,12	7,9		7,8	8
	14,18	10				

YETBUT-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	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 2 - STR Results

Z47XTZ-5872 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	10			2	

ZGEE2Q-5872 PowerPlex® Fusion 6C

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24	10,12	7,9	19,22.2	7,8	8,8
	14,18	10	17	19		

ZPKJP2-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14,14	29,30	15,15	X,Y	11,13
	21,24			19,22.2	7,8	8,8
	14,18	10			2	

ZZ6PNQ-5877 GlobalFiler™

	16,17.3	19,25	11.3,14	14,15	10,13	
	8,12	11,13	14,15	20,23	8,12	11,13
2	13,14	14	29,30	15	X,Y	11,13
	21,24			19,22.2	7,8	8
	14,18	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 3 - STR Results

22W96H-5872 Identifiler® Direct

		24,25		14,15	13,13	
	8,10	11,11			8,11	11,11
3	14,15	14,16	30,30		X,Y	11,13
	22,24				7,8	8,11
	18,18					

28YEKK-5872 GlobalFiler™ (DNA View)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

2K6B22-5872 Investigator® 24plex (FBI popstats)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10				

2QXD62-5872 GlobalFiler™ Express

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

2WZGXK-5877 GlobalFiler™ EXPRESS

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

32CRNU-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	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 3 - STR Results

36PRKL-5877 GlobalFiler™ (Combined Familias ver. 3.3.1)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

3B2FKH-5872 GlobalFiler™ (eDNA)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

3CU9F2-5872 Investigator® 24plex

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10				

3EZU7L-5877 GlobalFiler™ (Familias, version 3.1.9.3)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

3G223J-5877 PowerPlex® Fusion6C (Familias v.3.3.1)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19		

496J9T-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	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 3 - STR Results

4LRTVY-5872 PowerPlex® FUSION, PowerPlex 21, PowerPlexESX17 and PowerPlex CS7 (Familias version 3.3.1)

	15,16	24,25	11.3,14	14,15	13	12,17
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18	10				

64TV9W-5877 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

68T76W-5877 GlobalFiler™ (KInCALc)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

693BHK-5872 VersaPlex 27PY

	15,16	24,25	11.3,14	14,15	13	12,17
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10	17	19		

6P9F6X-5872 PowerPlex® Fusion 5C

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

6VDCQH-5872 PowerPlex® Fusion, iPLEXSTR

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	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 3 - STR Results

73CYGW-5872 PowerPlex® Fusion (Popstats)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

77QVNJ-5872 PowerPlex® Fusion 6C

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19		

7BLMUV-5872 PowerPlex® CS7, 21, GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	12,17
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18	10	17	19	2	

7YU2QL-5877 GenePrint 24 (In-house Software)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18					

8D9NCN-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

93MK6P-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	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 3 - STR Results

9D2WXD-5872 PowerPlex®

	15,16	24,25	11.3,14	14,15	13,13	-
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19	-	

9N7PPT-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

ACKZ7D-5877 GlobalFiler™ Express

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	-	-	16,19	7,8	8,11
	18,18	10	-	-	2	

AG28UD-5877 PowerPlex® Fusion 6C (eDNA version 3.2.0.0 2017-03-13)

	15,16	24,25	11.3,14	14,15	13	Not Tested
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18	10	17	19	Not Tested	

AM82LN-5872 GlobalFiler™ (DBLR)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

AQM9AM-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	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 3 - STR Results

AU6Q6D-5877 PowerPlex® 6C (Laboratory Specific Software)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18	10	17	19		

C3AGKL-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

CFHZJF-5877 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

CMHKJQ-5877 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

CNUJFK-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

DEJGUJ-5872 PowerPlex® F6C (PopStats)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19		

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

DH6229-5877 GlobalFiler™ (FBI Popstats)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

DV6ZP7-5877 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

EF96PK-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

EWGWRP-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

F8TL97-5872 GlobalFiler™ Express

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

FPCFWA-5872 Investigator ESSplex SE QS (Familias)

	15,16	24,25	11.3,14	14,15		
		11,11	15,16	18.3,23		11,11
3	14,15	14,16	30,30	15,17	X,Y	
	22,24			16,19	7,8	
	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

FPTVPG-5872 PowerPlex® 21 (Kinship(In house application))

	15,16	24,25		14,15	13,13	12,17
	8,10	11,11		18.3,23	8,11	11,11
3	14,15	14,16	30,30		X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18,18					

FYHKM6-5872 GlobalFiler™ Express

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

GHNEU2-5872 PowerPlex® Fusion 5C (KIn CALc 5.0.12)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	Inconclusive				

GM2WBJ-5872 PowerPlex® Fusion (POPSTATS)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

GNCYWH-5872 PowerPlex® Fusion (CODIS PopStats)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

GREW8B-5872 GlobalFiler™ (Genoproof 3.0.7)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	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 3 - STR Results

GZPYTB-5872 PowerPlex® FUSION 5C (M-FISys 11.09)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18,18	10				

H6EVV8-5872 PowerPlex® Fusion

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

H87UA6-5877 GlobalFiler™ Express

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

HJFUJ4-5872 PowerPlex® 24 fusion

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18,18	10				

HWLNBG-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

J3K7KQ-5877 Investigator® 24plex, MainstAY Verogen (Familias)

	15,16	24,25	11.3,14	14,15	13,13	12,17
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,7	16,19	7,8	8,11
	18,18	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 3 - STR Results

JA7P7D-5872 PowerPlex® Fusion 5C

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

JDRAD3-5877 GlobalFiler™ (PopStats)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

JK6HE6-5877 PowerPlex® 6c

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19		

JQG7E2-5877 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

JRAYAK-5872 GlobalFiler™ (PopStats)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

LRXAZ4-5872 PowerPlex® Fusion 6C, GlobalFiler™, NGM SElect

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18	10	17	19	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

LU6RYY-5872 GlobalFiler™ Express

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

LUEBFM-5877 Investigator® 24plex (GeneMarker V 2.9.5)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10				

LUP9E2-5877 GlobalFiler™ Express

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

M2HZZZ-5877 GlobalFiler™ Express

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

MDDEXC-5872 PowerPlex® Fusion

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

MFPURD-5872 PowerPlex® Fusion

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	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 3 - STR Results

MJKHA7-5872 Identifiler® Plus (STRlab)

		24,25		14,15	13,13	
	8,10	11,11			8,11	11,11
3	14,15	14,16	30,30		X,Y	11,13
	22,24				7,8	8,11
	18,18					

MK4AUM-5872 Investigator® 24plex, MainstAY Verogen (Familias)

	15,16	24,25	11.3,14	14,15	13,13	12,17
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,7	16,19	7,8	8,11
	18,18	10				

MM26J6-5872 PowerPlex® Fusion (Gene Analysen)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30		X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

MXJMCB-5877 GlobalFiler™ (Popstats)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

N2ZCBE-5877 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

N9W7AC-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	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 3 - STR Results

NHLXV6-5872 PowerPlex® ESX17, PPHS16, HDPlex

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18	10	17	19		

NQE6GV-5872 GlobalFiler™ (eDNA)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

NZ7NV4-5872 PowerPlex® Fusion

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

P3RPDX-5877 PowerPlex® Fusion 6C (KinCalc v 5.0.12 Beta)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18	10	17	19		

P4Y6K4-5872 PowerPlex® Fusion System

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

Q2R9E6-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	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 3 - STR Results

QJ8HE7-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

RERAQ7-5872 PowerPlex® 21

	15,16	24,25		14,15	13,13	12,17
	8,10	11,11		18.3,23	8,11	11,11
3	14,15	14,16	30,30		X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18,18					

RKZQZV-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	

RWC2Q7-5872 PowerPlex® 21 (Kinship)

	15,16	24,25		14,15	13,13	12,17
	8,10	11,11		18.3,23	8,11	11,11
3	14,15	14,16	30,30		X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18,18					

TAWX69-5872 PowerPlex® FUSION, GlobalFiler™, VERIFILER PLUS (FAMILIAS 3.3.1)

	15,16	24,25	11.3,14	14,15	13	12,17
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18	10	17	19	2	

TCHHCX-5872 PowerPlex® FUSION 6C (M-FISYS)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18,18	10	17	19		

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

VFV2AX-5877 PowerPlex® Fusion 5C (DNAView)

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

VLM9UR-5877 GlobalFiler™ (GeneMapper ID-X software v1.6)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

VVB37N-5872 PowerPlex® 6C (eDNA)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19		

W763VX-5872 PowerPlex® Fusion 6C (Familias v3.3.1 (using national allele frequencies))

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19		

W7LWW8-5872 Investigator® 24plex

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10				

WR449Z-5872 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	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 3 - STR Results

WUBL8W-5872 PowerPlex® Fusion 6C (M-FISys)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19		

XMTF94-5877 GlobalFiler™

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

XR3TRN-5872 GlobalFiler™ Express

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	

XYGF2R-5877 GlobalFiler™ (eDNA)

	15,16	24,25	11.3,14	14,15	13	12,17
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18	10			2	

XZTEV2-5872 PowerPlex® Fusion

	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24	11,12	7,16		7,8	8,11
	18	10				

YETBUT-5872 GlobalFiler™ (DNA View)

	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	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 3 - STR Results

Z47XTZ-5872	GlobalFiler™					
	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18	10			2	
ZGEE2Q-5872	PowerPlex® Fusion 6C					
	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24	11,12	7,16	16,19	7,8	8,11
	18,18	10	17	19		
ZPKJP2-5877	GlobalFiler™					
	15,16	24,25	11.3,14	14,15	13,13	
	8,10	11,11	15,16	18.3,23	8,11	11,11
3	14,15	14,16	30,30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	18,18	10			2	
ZZ6PNQ-5877	GlobalFiler™					
	15,16	24,25	11.3,14	14,15	13	
	8,10	11	15,16	18.3,23	8,11	11
3	14,15	14,16	30	15,17	X,Y	11,13
	22,24			16,19	7,8	8,11
	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

22W96H-5872 Identifiler® Direct

		18,20		16,17	10,11	
	8,12	10,15			11,14	12,12
4	14,17	12,15	31,31		X,Y	10,12
	21,21				7,9	8,11
	16,18					

28YEKK-5872 GlobalFiler™ (DNA View)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

2K6B22-5872 Investigator® 24plex (FBI popstats)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10				

2QXD62-5872 GlobalFiler™ Express

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

2WZGXK-5877 GlobalFiler™ EXPRESS

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

32CRNU-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	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

36PRKL-5877 GlobalFiler™ (Combined Familias ver. 3.3.1)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

3B2FKH-5872 GlobalFiler™ (eDNA)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

3CU9F2-5872 Investigator® 24plex

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10				

3EZU7L-5877 GlobalFiler™ (familias)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

3G223J-5877 PowerPlex® Fusion6C

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

496J9T-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	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

4LRTVY-5872 PowerPlex® FUSION, PowerPlex 21, PowerPlexESX17 and PowerPlex CS7

	16,16.3	18,20	11	16,17	10,11	16,18
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10				

64TV9W-5877 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

68T76W-5877 GlobalFiler™ (KInCALc)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

693BHK-5872 VersaPlex 27PY

	16,16.3	18,20	11	16,17	10,11	16,18
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10	20	20		

6P9F6X-5872 PowerPlex® Fusion 5C

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

6VDCQH-5872 PowerPlex® Fusion, iPLEXSTR

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	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

73CYGW-5872 PowerPlex® Fusion

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

77QVNJ-5872 PowerPlex® Fusion 6C

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

7BLMUV-5872 PowerPlex® CS7, 21, GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	16,18
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20	2	

7YU2QL-5877 GenePrint 24 (In-house Software)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18					

8D9NCN-5872 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

93MK6P-5872 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	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

9D2WXD-5872 PowerPlex®

	16,16.3	18,20	11,11	16,17	10,11	-
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20	-	

9N7PPT-5872 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

ACKZ7D-5877 GlobalFiler™ Express

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	-	-	24.2,31.2	7,9	8,11
	16,18	10	-	-	2	

AG28UD-5877 PowerPlex® Fusion 6C (eDNA version 3.2.0.0 2017-03-13)

	16,16.3	18,20	11	16,17	10,11	Not Tested
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20	Not Tested	

AM82LN-5872 GlobalFiler™ (DBLR)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

AQM9AM-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	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

AU6Q6D-5877 PowerPlex® 6C (Laboratory Specific Software)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

C3AGKL-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

CFHZJF-5877 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

CMHKJQ-5877 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

CNUJFK-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

DEJGUJ-5872 PowerPlex® F6C (PopStats)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

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

DH6229-5877 GlobalFiler™ (FBI Popstats)						
	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	
DV6ZP7-5877 GlobalFiler™						
	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	
EF96PK-5872 GlobalFiler™						
	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	
EWGWRP-5872 GlobalFiler™						
	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	
F8TL97-5872 GlobalFiler™ Express						
	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	
FPCFWA-5872 Investigator ESSplex SE QS (Familias)						
	16,16.3	18,20	11,11	16,17		
		10,15	16,17	23,34		12,12
4	14,17	12,15	31,31	15,16	X,Y	
	21,21			24.2,31.2	7,9	
	16,18					

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

FPTVPG-5872 PowerPlex® 21 (Kinship (in house application))

	16,16.3	18,20		16,17	10,11	16,18
	8,12	10,15		23,24	11,14	12,12
4	14,17	12,15	31,31		X,Y	10,12
	21,21	14,15	5,9		7,9	8,11
	16,18					

FYHKM6-5872 GlobalFiler™ Express

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

GHNEU2-5872 PowerPlex® Fusion 5C (KIn CALc 5.0.12)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	Inconclusive				

GM2WBJ-5872 PowerPlex® Fusion

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

GNCYWH-5872 PowerPlex® Fusion

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

GREW8B-5872 GlobalFiler™ (Genoproof 3.0.7)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	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

GZPYTB-5872 PowerPlex® FUSION 5C (M-FISys 11.09)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9		7,9	8,11
	16,18	10				

H6EVV8-5872 PowerPlex® Fusion

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

H87UA6-5877 GlobalFiler™ Express

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

HJFUJ4-5872 PowerPlex® 24 fusion

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9		7,9	8,11
	16,18	10				

HWLNBG-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2		8,11
	16,18	10			2	

J3K7KQ-5877 Investigator® 24plex, MainstAY Verogen (Familias)

	16,16.3	18,20	11,11	16,17	10,11	16,18
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	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

JA7P7D-5872 PowerPlex® Fusion 5C

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

JDRAD3-5877 GlobalFiler™ (PopStats)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

JK6HE6-5877 PowerPlex® 6c

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

JQG7E2-5877 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

JRAYAK-5872 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

LRXAZ4-5872 PowerPlex® Fusion 6C, GlobalFiler™, NGM SElect

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20	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

LU6RYY-5872 GlobalFiler™ Express

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

LUEBFM-5877 Investigator® 24plex (GeneMarker V 2.9.5)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10				

LUP9E2-5877 GlobalFiler™ Express

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

M2HZZZ-5877 GlobalFiler™ Express

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

MDDEXC-5872 PowerPlex® Fusion

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

MFPURD-5872 PowerPlex® Fusion

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	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

MJKHA7-5872 Identifiler® Plus (STRlab)

		18,20		16,17	10,11	
	8,12	10,15			11,14	12,12
4	14,17	12,15	31,31		X,Y	10,12
	21,21				7,9	8,11
	16,18					

MK4AUM-5872 Investigator® 24plex, MainstAY Verogen (Familias)

	16,16.3	18,20	11,11	16,17	10,11	16,18
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10				

MM26J6-5872 PowerPlex® Fusion (Gene Analysen)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31		X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

MXJMCB-5877 GlobalFiler™ (Popstats)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

N2ZCBE-5877 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

N9W7AC-5872 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	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

NHLXV6-5872 PowerPlex® ESX17, PPHS16, HDPlex

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10				

NQE6GV-5872 GlobalFiler™ (eDNA)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

NZ7NV4-5872 PowerPlex® Fusion

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

P3RPDX-5877 PowerPlex® Fusion 6C (KinCalc v 5.0.12 Beta)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

P4Y6K4-5872 PowerPlex® Fusion System

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

Q2R9E6-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	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

QJ8HE7-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

RERAQ7-5872 PowerPlex® 21

	16,16.3	18,20		16,17	10,11	16,18
	8,12	10,15		23,24	11,14	12,12
4	14,17	12,15	31,31		X,Y	10,12
	21,21	14,15	5,9		7,9	8,11
	16,18					

RKZQZV-5872 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

RWC2Q7-5872 PowerPlex® 21 (Kinship)

	16,16.3	18,20		16,17	10,11	16,18
	8,12	10,15		23,24	11,14	12,12
4	14,17	12,15	31,31		X,Y	10,12
	21,21	14,15	5,9		7,9	8,11
	16,18					

TAWX69-5872 PowerPlex® FUSION, GlobalFiler™, VERIFILER PLUS (3.3.1)

	16,16.3	18,20	11	16,17	10,11	16,18
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20	2	

TCHHCX-5872 PowerPlex® FUSION 6C (M-FISYS)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9		7,9	8,11
	16,18	10	20	20		

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

VFV2AX-5877 PowerPlex® Fusion 5C (DNAView)

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

VLM9UR-5877 GlobalFiler™ (GeneMapper ID-X software v1.6)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

VVB37N-5872 PowerPlex® 6C (eDNA)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

W763VX-5872 PowerPlex® Fusion 6C (Familias v3.3.1 (using national allele frequencies))

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

W7LWW8-5872 Investigator® 24plex

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10				

WR449Z-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	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

WUBL8W-5872 PowerPlex® Fusion 6C (M-FISys)

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

XMTF94-5877 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

XR3TRN-5872 GlobalFiler™ Express

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

XYGF2R-5877 GlobalFiler™ (eDNA)

	16,16.3	18,20	11	16,17	10,11	16,18
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10			2	

XZTEV2-5872 PowerPlex® Fusion

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21	14,15	5,9		7,9	8,11
	16,18	10				

YETBUT-5872 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	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

Z47XTZ-5872 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

ZGEE2Q-5872 PowerPlex® Fusion 6C

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21	14,15	5,9	24.2,31.2	7,9	8,11
	16,18	10	20	20		

ZPKJP2-5877 GlobalFiler™

	16,16.3	18,20	11,11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12,12
4	14,17	12,15	31,31	15,16	X,Y	10,12
	21,21			24.2,31.2	7,9	8,11
	16,18	10			2	

ZZ6PNQ-5877 GlobalFiler™

	16,16.3	18,20	11	16,17	10,11	
	8,12	10,15	16,17	23,24	11,14	12
4	14,17	12,15	31	15,16	X,Y	10,12
	21			24.2,31.2	7,9	8,11
	16,18	10			2	

Paternity Index Results

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

22W96H-5872	[Location Identifying Database]					
		4.7170		1.9716	6.4641	
	3.0340	2.5947			4.1051	3.1299
3PI	2.9833	1.4663	3.9667			6.8399
	3.6364				4.3630	0.9381
	4.4464					
28YEKK-5872	NIST-STRBASE					
	3.6837	4.8784	8.2045	1.8325	7.0097	
	3.4712	2.4642	2.5423	7.2200	4.1494	3.1806
3PI	3.7216	1.3831	3.5392	1.5560		6.1186
	3.7216			6.9423	5.2319	0.9525
	4.9452					
2K6B22-5872	FBI PopStats					
	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075			7.4850	3.9620	0.91408
	4.5914					
2QXD62-5872	NIST-STRBASE					
	3.6845	4.878	8.2101	1.8321	7.0077	
	3.4722	2.4642	2.5419	7.215	4.1493	3.1806
3PI	3.723	1.3831	3.5398	1.5561		6.1199
	3.723			6.9444	5.2301	0.9525
	4.9455					
2WZGXK-5877	NIST-STRBASE					
	1.838	2.451	5.206	3.248	3.496	
	1.736	6.578	1.269	3.623	2.083	1.593
3PI	1.865	1.385	1.767	1.557		3.857
	1.865			3.472	3.893	0.952
	2.475					
32CRNU-5872	FBI PopStats, NIST 2017					
	3.68	4.87	8.21	1.83	7.00	
	3.47	2.46	2.54	7.21	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.12
	3.72				5.23	0.952
3B2FKH-5872	NIST-STRBASE					
	3.6846	4.8780	8.2102	1.8322	7.0077	
	3.4722	2.4643	2.5419	7.2150	4.1494	3.1807
3PI	3.7230	1.3831	3.5398	1.5562		6.1200
	3.7230			6.9444	5.2301	0.9526
	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					

Item 3PI - Paternity Index Results

3CU9F2-5872	FBI PopStats					
	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075			7.4850	3.9620	0.91408
	4.5914					
3EZU7L-5877	laboratory specific database					
	3,732150988	6,171631424	6,333356555	2,0693031	5,708571428	
	2,593264249	2,645565635	2,714276021	6,741913083	3,902343751	3,265626021
3PI	2,829969554	1,795984371	3,870367646	1,375001375		8,928571429
	3,870362343			5,09754705	3,870358473	0,9406779662
	4,494619934					
3G223J-5877	STRidER					
	4,16	4,83	8,07	1,95	6,25	
	2,85	2,45	2,43	5,76	3,92	3,33
3PI	2,97	1,43	4,17	1,38		8,91
	3,71	2,21	3,24	6,85	4,52	0,92
	4,66					
496J9T-5872	FBI PopStats, NIST 2017					
	3.68	4.87	8.21	1.83	7.00	
	3.47	2.46	2.54	7.21	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.12
	3.72			N/A	5.23	0.95
	N/A					
4LRTVY-5872	NIST-STRBASE					
	2,84	6,38	11,24	1,55	9,25	2,43
	4,14	3,06	2,36	8,74	4,54	3,78
3PI	3,11	1,41	3,66	1,17		8,43
	3,52	3,18	4,29	5,62	5,49	1,03
	5,55					
64TV9W-5877	NIST-STRBASE					
	3.57	4.62	7.32	1.84	6.39	
	3.38	2.33	2.52	omitted	3.98	3.11
3PI	3.60	1.36	3.44	1.48		5.66
	3.60			6.34	4.92	0.938
	4.68					
68T76W-5877	NIST-STRBASE					
	3.57	4.62	7.32	1.84	6.39	
	3.38	2.33	2.52	6.56	3.98	3.11
3PI	3.60	1.36	3.44	1.48		5.66
	3.60			6.34	4.92	0.938
	Omitted					

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

693BHK-5872	FBI PopStats					
	3.685	4.878	8.210	1.832	7.008	2.123
	3.472	2.464	2.542	7.215	4.149	3.181
3PI	3.723	1.383	3.540	1.556		6.120
	3.723	2.149	2.959		5.230	0.9526
	4.946					
6P9F6X-5872	FBI PopStats					
	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075	2.3764	3.6738		3.9620	0.91408
	4.5914					
6VDCQH-5872	NIST-STRBASE					
	3.68	4.88	8.21	1.83	7.01	
	3.47	2.46	2.54	7.22	4.15	3.18
3PI	3.72	1.38	3.54	1.56		6.12
	3.72	2.15	2.96	6.94	5.23	0.95
	4.95					
73CYGW-5872	NIST-STRBASE					
	3.68	4.88	8.21	1.83	7.01	
	3.47	2.46	2.54		4.15	3.18
3PI	3.72	1.38	3.54	1.56		6.12
	3.72	2.15	2.96		5.23	0.953
	4.95					
77QVNJ-5872	NIST-STRBASE					
	3.6837	4.8784	8.2045	1.8325	7.0097	
	3.4712	2.4642	2.5423	7.2200	4.1494	3.1806
3PI	3.7216	1.3831	3.5392	1.5560		6.1186
	3.7216	2.1488	2.9590	6.9423	5.2319	0.9525
	4.9452					
7BLMUV-5872	NIST-STRBASE					
	3.51	5.99	10.3	1.64	6.13	2.33
	3.02	2.98	2.48	10.2	5.18	3.43
3PI	3.87	1.64	4.04	1.56		7.62
	3.65	2.95	4.18	5.37	3.98	1.07
	5.55					
7YU2QL-5877	NIST-STRBASE					
	3.684	4.878	8.205	1.832	7.010	
	3.471	2.464	2.542	7.220	4.149	3.181
3PI	3.722	1.383	3.539	1.556		6.120
	3.722	2.149	2.959		5.230	0.953
	4.945					

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

93MK6P-5872	FBI PopStats					
	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075			7.4850	3.9620	0.91408
9N7PPT-5872	FBI PopStats					
	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075			7.4850	3.9620	0.91408
ACKZ7D-5877	FBI PopStats					
	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075			-	3.9620	0.91408
	4.5914					
AG28UD-5877	NIST-STRBASE					
	3.6846	4.8780	8.2102	1.8322	7.0077	Not Tested
	3.4722	2.4643	2.5419	7.2150	4.1494	3.1807
3PI	3.7230	1.3831	3.5398	1.5562		6.1200
	3.7230	2.1487	2.9586	6.9444	5.2301	0.9526
	Not Reported					
AM82LN-5872	In-house Caucasian Database					
	3.80658E+00	See TPOX	see TPOX	1.90339E+00	3.45035E+01	
	2.74892E+00	2.55080E+00	2.54502E+00	See vWA	3.61426E+00	3.13301E+00
3PI	3.11976E+00	1.39704E+00	4.00964E+00	1.21044E+00		See D5S818
	3.65864E+00			6.61313E+00	4.17210E+00	3.91996E+01
	2.92149E+01					
AQM9AM-5872	FBI PopStats, NIST 2017					
	3.68	4.87	8.21	1.83	7.00	
	3.47	2.46	2.54	7.21	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.12
	3.72			N/A	5.23	0.952
	N/A					
AU6Q6D-5877	Laboratory Specific Database					
	4.488	5.181	5.938	2.020	6.623	
	3.060	2.541	2.885	6.729	4.926	3.672
3PI	2.846	1.433	4.297	1.374		6.964
	3.608	2.376	3.674	7.485	3.962	0.914
	4.591					

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

C3AGKL-5872 laboratory specific database

	3.9557	4.7125	11.2360	1.8990	6.2112	
	2.7933	2.7218	2.5760	6.5189	3.7453	3.2092
3PI	3.1990	1.4192	4.1911	1.2513		6.5789
	3.7994			7.4405	4.3630	0.9360
	5.2029					

CMHKJQ-5872 NIST-STRBASE

	3.57	4.62	7.32	1.84	6.39	
	3.38	2.33	2.52	omitted	3.98	3.11
3PI	3.60	1.36	3.44	1.48		5.66
	3.60			6.34	4.92	0.938
	4.68					

CNUJFK-5872 FBI PopStats, NIST 2017

	3.68	4.87	8.21	1.83	7.00	
	3.47	2.46	2.54	7.21	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.12
	3.72			N/A	5.23	0.952
	N/A					

DEJGUJ-5872 FBI PopStats

	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075	2.3764	3.6738	7.4850	3.9620	0.91408
	4.5914					

DH6229-5877 FBI PopStats

	3.5112	5.9880	10.267	1.6420	6.1312	
	3.0211	2.9815	2.4839	10.163	5.1813	3.4305
3PI	3.8670	1.6442	4.0388	1.5581		7.6220
	3.6470			5.3706	3.9841	1.0725
	5.5556					

DV6ZP7-5877 [Location Identifying Database]

		4.72		1.97	6.46	
	3.03	2.59			4.11	3.13
3PI	2.98	1.47	3.97			6.84
	3.64				4.36	0.94
	4.45					

EF96PK-5872 FBI PopStats

	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075			7.4850	3.9620	0.91408

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

EWGWRP-5872	NIST-STRBASE					
	3.5112	5.9880	10.2669	1.6420	6.1312	
	3.0211	2.9815	2.4839	-	5.1813	3.4305
3PI	3.8670	1.6442	4.0388	1.5581		7.6220
	3.6470			5.3706	3.9841	1.0725
	5.5556					
F8TL97-5872	NIST-STRBASE					
	3.6845	4.8780	8.2101	1.8321	7.0077	
	3.4722	2.4642	2.5419	7.2150	4.1493	3.1806
3PI	3.7230	1.3831	3.5398	1.5561		6.1199
	3.7230			6.9444	5.2301	0.9525
	4.9455					
FPCFWA-5872	National Pop. database					
	3.7172	4.7454	4.8038	1.9179		
		2.5831	2.0541	6.4952		3.5198
3PI	2.9927	1.6541	5.0412	1.2919		
	3.1914			7.128	3.592	
	5.2248					
FPTVPG-5872	NIST-STRBASE					
	3.6846	4.8780		1.8322	7.0077	2.1115
	3.4722	2.4643		7.2150	4.1494	3.1807
3PI	3.7230	1.3831	3.5398			6.1200
	3.7230	2.1487	2.9586		5.2301	0.9526
	4.9456					
FYHKM6-5872	NIST-STRBASE					
	3.6845	4.8780	8.2101	1.8321	7.0077	
	3.4722	2.4642	2.5419	7.2150	4.1493	3.1806
3PI	3.7230	1.3831	3.5398	1.5561		6.1199
	3.7230			6.9444	5.2301	0.9525
	4.9455					
GHNEU2-5872	NIST-STRBASE					
	3.68	4.87	8.20	1.83	7.00	
	3.47	2.46	2.54	7.22	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.11
	3.72	2.14	2.95		5.23	0.952
	4.94					
GM2WBJ-5872	NIST-STRBASE					
	3.68	4.88	8.21	1.83	7.01	
	3.47	2.46	2.54		4.15	3.18
3PI	3.72	1.38	3.54	1.56		6.12
	3.72	2.15	2.96		5.23	0.953
	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 3PI - Paternity Index Results

GNCYWH-5872 NIST-STRBASE						
	3.68	4.88	8.21	1.83	7.01	
	3.47	2.46	2.54		4.15	3.18
3PI	3.72	1.38	3.54	1.56		6.12
	3.72	2.15	2.96		5.23	0.953
	4.95					
GREW8B-5872 NIST-STRBASE						
	3.6836	4.8783	8.2045	1.8324	7.0097	
	3.4711	2.4641	2.5422	7.2200	4.1494	3.1806
3PI	3.7216	1.3831	3.5392	1.5560		6.1186
	3.7216			6.9423	5.2318	0.9525
	4.9452					
GZPYTB-5872 NIST-STRBASE						
	3.68	4.88	8.21	1.83	7.01	
	3.47	2.46	2.54	7.22	4.15	3.18
3PI	3.72	1.38	3.54	1.56		6.12
	3.72	2.15	2.96		5.23	0.95
	4.95					
H6EVV8-5872 NIST-STRBASE						
	3.6845	4.8780	8.2101	1.8321	7.0077	
	3.4722	2.4642	2.5419	7.2150	4.1493	3.1806
3PI	3.7230	1.3831	3.5398	1.5561		6.1199
	3.7230	2.1486	2.9585		5.2301	0.9525
	4.9455					
H87UA6-5877 FBI PopStats						
	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075				3.9620	0.91408
	4.5914					
HJFUJ4-5872 FBI PopStats						
	4.49	5.18	5.94	2.02	6.62	
	3.06	2.54	2.89	6.73	4.93	3.67
3PI	2.85	1.43	4.30	1.37		6.96
	3.61	2.38	3.67		3.96	0.92
	4.59					
HWLNBG-5872 [Location Identifying Database]						
	3.95	4.71	11.23	1.90	6.21	
	2.79	2.72	2.58	6.52	3.74	3.21
3PI	3.20	1.42	4.19	1.25		6.8
	3.80			7.44	4.36	0.94
	5.20					

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

J3K7KQ-5877	NIST-STRBASE					
	2.843	6.377	11.234	1.552	9.251	2.433
	4.139	3.064	2.359	8.743	4.537	3.776
3PI	3.105	1.413	3.658	1.174		8.431
	3.522	3.175	8.581	5.616	5.488	1.030
	5.552					
JA7P7D-5872	NIST-STRBASE					
	3.5112	5.9880	10.267	1.6420	6.1312	
	3.0211	2.9815	2.4839	10.163	5.1813	3.4305
3PI	3.8670	1.6442	4.0388	1.5581		7.6220
	3.6470	2.9481	4.1771		3.9841	1.0725
JDRAD3-5877	FBI PopStats					
	3.6846	4.878	8.2102	1.8322	7.0077	
	3.4722	2.4643	2.5419	7.215	4.1494	3.1807
3PI	3.723	1.3831	3.5398	1.5562		6.1200
	3.723			6.9444	5.2301	0.95256
	4.9456					
JK6HE6-5877	NIST STRBASE Pop. Caucasian					
	4.289	5.599	6.841	1.759	6.745	
	3.260	2.512	2.354	4.904	4.235	3.232
3PI	2.658	1.432	3.757	1.314		7.158
	3.512	2.401	3.344	6.029	4.128	0.970
	5.515					
JQG7E2-5877	Laboratory specific database					
	4.69	4.69	9.53	1.79	5.75	
	3.08	2.23	3.08	6.63	4.01	3.19
3PI	3.47	1.46	4.07	1.35		5.65
	3.43			8.47	4.24	0.93
	5.60					
JRAYAK-5872	NIST-STRBASE					
	3.6846	4.8780	8.2102	1.8322	7.0077	
	3.4722	2.4643	2.5419		4.1494	3.1807
3PI	3.7230	1.3831	3.5398	1.5562		6.1200
	3.7230			6.9444	5.2301	0.95256
	4.9456					
LRXAZ4-5872	Local Database					
	6.80	3.64	12.63	2.00	6.23	
	2.97	2.46	2.15	4.25	3.56	3.47
3PI	3.87	1.33	4.21	1.34		7.34
	3.79	3.13	3.61	6.75	5.03	0.91
	4.79					

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

LU6RYY-5872	NIST-STRBASE					
	3.6845	4.8780	8.2101	1.8321	7.0077	
	3.4722	2.4642	2.5419	7.2150	4.1493	3.1806
3PI	3.7230	1.3831	3.5398	1.5561		6.1199
	3.7230			6.9444	5.2301	0.9525
	4.9455					
LUEBFM-5877	laboratory specific database					
	3.65	5.86	6.9	1.86	5.39	
	3.09	2.5	2.21	5.75	3.31	3.2
3PI	2.95	1.56	5.19	1.47		8.64
	3.55			8.33	4.04	0.95
	4.52					
M2HZZZ-5877	FBI PopStats					
	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075				3.9620	0.91408
	4.5914					
MDDEXC-5872	NIST-STRBASE					
	3.68	4.88	8.21	1.83	7.01	
	3.47	2.46	2.54		4.15	3.18
3PI	3.72	1.38	3.54	1.56		6.12
	3.72	2.15	2.96		5.23	0.953
	4.95					
MFPURD-5872	NIST-STRBASE					
	3.68	4.88	8.21	1.83	7.01	
	3.47	2.46	2.54		4.15	3.18
3PI	3.72	1.38	3.54	1.56		6.12
	3.72	2.15	2.96		5.23	0.953
	4.95					
MJKHA7-5872	NDSD - National DNA Statistics Database					
		5.31		2.07	6.08	
	3.3	2.52			3.76	2.93
3PI	3.98	1.64	4.3			7.7
	3.55				4.49	0.97
	5.02					
MK4AUM-5872	NIST-STRBASE					
	2.843	6.377	11.234	1.552	9.251	2.433
	4.139	3.064	2.359	8.743	4.537	3.776
3PI	3.105	1.413	3.658	1.174		8.431
	3.522	3.175	8.581	5.616	5.488	1.030
	5.552					

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

MM26J6-5872	NIST-STRBASE					
	3.58	10.41	11.16	1.62	4.10	
	2.29	4.72	3.28	18.93	17.85	3.27
3PI	9.65	2.19	5.77			8.36
	3.13	6.08	6.26		1.99	1.80
	6.34					
MXJMCB-5877	FBI PopStats					
	3.51	5.99	10.3	1.64	6.13	
	3.02	2.98	2.48	10.2	5.18	3.43
3PI	3.87	1.64	4.04	1.56		7.62
	3.65			5.37	3.98	1.07
	5.56					
N2ZCBE-5877	NIST-STRBASE					
	3.6846	4.8780	8.2102	1.8322	7.0077	
	3.4722	2.4643	2.5419	NA	4.1494	3.1807
3PI	3.7230	1.3831	3.5398	1.5562		6.1200
	3.7230			6.9444	5.2301	0.95256
	4.9456					
N9W7AC-5872	FBI PopStats					
	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075			7.4850	3.9620	0.91408
NHLXV6-5872	local database					
	4.385965	4.0	10.0	1.811594	11.903762	
	4.032258	2.604167	2.564103	6.097561	4.310345	3.048780
3PI	2.976190	1.25	4.629630	1.373626		7.8125
	3.676471	2.958580	3.378378	6.097561	4.464286	0.880282
	3.968254					
NQE6GV-5872	NIST-STRBASE					
	3.6846	4.8780	8.2102	1.8322	7.0077	
	3.4722	2.4643	2.5419	7.2150	4.1494	3.1807
3PI	3.7230	1.3831	3.5398	1.5562		6.1200
	3.7230			6.9444	5.2301	0.9526
	4.9456					
NZ7NV4-5872	NIST-STRBASE					
	3.6845	4.8780	8.2101	1.8321	7.0077	
	3.4722	2.4642	2.5419	7.2150	4.1493	3.1806
3PI	3.7230	1.3831	3.5398	1.5561		6.1199
	3.7230	2.1486	2.9585		5.2301	0.9525
	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					

Item 3PI - Paternity Index Results

P3RPDX-5877	NIST-STRBASE					
	3.68	4.87	8.20	1.83	7.00	
	3.47	2.46	2.54	7.22	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.11
	3.72	2.14	2.95	6.94	5.23	0.95
P4Y6K4-5872	Estatal (Local database)					
	1.174	5.319		4.128	4.587	
	2.358	9.615		6.098	3.125	1.938
3PI	1.462	1.901	2.066			4.827
	1.506	1.412	3.049		4.006	0.931
	2.994					
Q2R9E6-5872	FBI PopStats, NIST 2017					
	3.68	4.87	8.21	1.83	7.00	
	3.47	2.46	2.54	7.21	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.12
	3.72				5.23	0.95
QJ8HE7-5872	FBI PopStats, NIST 2017					
	3.68	4.87	8.21	1.83	7.00	
	3.47	2.46	2.54	7.21	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.12
	3.72			N/A	5.23	0.952
	N/A					
RERAQ7-5872	NIST-STRBASE					
	3.512	5.988		1.642	6.130	2.333
	3.020	2.981		10.16	5.180	3.430
3PI	3.866	1.644	4.039			7.618
	3.648	2.949	4.177		3.985	1.073
	5.555					
RKZQZV-5872	NIST-STRBASE					
	2.8436	6.3776	11.235	1.5528	9.2516	
	4.1391	3.0644	2.3596	8.7430	4.5372	3.7761
3PI	3.1053	1.4131	3.6583	1.1743		8.4317
	3.5226			5.6163	5.4885	1.0305
	5.5525					
RWC2Q7-5872	NIST-STRBASE					
	3.6846	4.8780		1.8322	7.0077	2.1115
	3.4722	2.4643		7.215	4.1494	3.1807
3PI	3.7230	1.3831	3.5398			6.12
	3.723	2.1487	2.9586		5.2301	0.9526
	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					

Item 3PI - Paternity Index Results

TAWX69-5872 NIST-STRBASE

	3.6846	4.8785	8.2110	1.8322	7.0084	2.1234
	3.4722	2.4643	2.5425	7.2165	4.1494	3.1807
3PI	3.7234	1.3831	3.5398	1.5562		6.1200
	3.7234	2.1491	2.9589	6.9472	5.2306	0.9527
	4.9456					

TCHHCX-5872 NIST-STRBASE, [Location Identifying Database]

	4.7946	11.2047	13.669	3.425	131.1868	
	6.0538	15.8996	3.4802	14.1261	7.4216	7.5493
3PI	8.0043	3.4885	4.2232	2.7578		6.694
	11.7465	3.2723	63.7755		7.958	2.1948
	24.5186					

VFV2AX-5877 FBI PopStats, NIST/Promega

	3.39	5.08	8.22	2.00	6.74	
	3.02	2.49	2.54	7.31	4.91	3.62
3PI	2.85	1.48	4.27	1.56		6.78
	3.57	2.08	2.90		3.91	0.913
	4.47					

VLM9UR-5877 [Location Identifying Database]

	2.122	7.353	6.017	1.385	6.689	
	3.762	2.904	2.470	9.191	1.859	4.013
3PI	2.398	1.914	3.782	1.880		7.353
	2.879			7.194	8.945	0.904
	5.297					

VVB37N-5872 FBI PopStats

	3.6846	5.2411	8.2102	2.0202	6.8399	
	3.0600	2.5126	2.5412	7.2150	5.0251	3.6550
3PI	2.8818	1.4903	4.3065	1.5562		6.9638
	3.6284	2.5126	3.2468	6.9444	3.9620	0.9141
	4.5065					

W763VX-5872 Software Familias v3.3.1 (using national allele frequencies)

	2.528888282	16.1575	14.13166674	1.254748533	10.65454545	
	4.599999999	2.952380953	2.540611562	12.47247706	7.818383813	3.986013984
3PI	3.325000001	2.085021884	4.5625	1.10506056		8.428571428
	4.259187488	3.047658862	9.512328729	3.051714281	7.5	1.070580094
	6.700483094					

W7LWW8-5872 FBI PopStats

	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075			7.4850	3.9620	0.91408
	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

WR449Z-5872 FBI PopStats, NIST 2017

	3.68	4.87	8.21	1.83	7.00	
	3.47	2.46	2.54	7.21	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.12
	3.72				5.23	.95

WUBL8W-5872 [Location Identifying Database]

	3.0107	12.2561		4.2732	99.7208	
	6.3061	13.9758		17.4216	6.2751	6.7291
3PI	6.4122	3.6143	5.5244			6.8183
	11.9526	3.1669	217.77		5.1364	1.7339
	20.7917					

XMTF94-5877 NIST-STRBASE

	3.57	4.62	7.32	1.84	6.39	
	3.38	2.33	2.52	omitted	3.98	3.11
3PI	3.60	1.36	3.44	1.48		5.66
	3.60			6.34	4.92	0.938
	4.68					

XR3TRN-5872 FBI PopStats, FBI Caucasian

	4.49376E+00	5.18209E+00	5.94132E+00	2.02275E+00	6.62727E+00	
	3.06396E+00	2.54450E+00	2.88911E+00	6.73818E+00	4.92568E+00	3.67847E+00
3PI	2.84944E+00	1.43549E+00	4.30524E+00	1.37661E+00		6.96275E+00
	3.61146E+00			7.49270E+00	3.96196E+00	9.15698E-01
	4.59705E+00					

XYGF2R-5877 NIST-STRBASE

	3.6846	4.8780	8.2102	1.8322	7.0077	2.1115
	3.4722	2.4643	2.5419	7.2150	4.1494	3.1807
3PI	3.7230	1.3831	3.5398	1.5562		6.1200
	3.7230	2.1487	2.9586	6.9444	5.2301	0.9526
	4.9456					

XZTEV2-5872 NIST-STRBASE

	3.68	4.88	8.21	1.83	7.01	
	3.47	2.46	2.54		4.15	3.18
3PI	3.72	1.38	3.54	1.56		6.12
	3.72	2.15	2.96		5.23	0.953
	4.95					

YETBUT-5872 NIST-STRBASE

	3.68	4.88	8.20	1.83	7.01	
	3.47	2.46	2.54	7.22	4.15	3.18
3PI	3.72	1.38	3.54	1.56		6.12
	3.72			6.94	5.23	.953
	Linked					

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

Z47XTZ-5872 FBI PopStats

	4.4883	5.1813	5.9382	2.0202	6.6225	
	3.0600	2.5407	2.8852	6.7295	4.9261	3.6724
3PI	2.8458	1.4327	4.2974	1.3740		6.9638
	3.6075			7.4850	3.9620	0.91408

ZGEE2Q-5872 NIST-STRBASE

	3.68	4.87	8.21	1.83	7.00	
	3.47	2.46	2.54	7.21	4.14	3.18
3PI	3.72	1.38	3.53	1.55		6.12
	3.72	2.14	2.95	6.94	5.23	0.95
	4.94					

ZPKJP2-5877 NIST-STRBASE

	3.569	4.621	7.318	1.840	6.390	
	3.376	2.333	2.517	omitted	3.983	3.112
3PI	3.604	1.364	3.440	1.481		5.660
	3.603			6.339	4.921	0.9378
	4.681					

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

22W96H-5872 [Location Identifying Database]

		0.00		0.00	0.00	
	3.034	0.00			0.00	0.00
4PI	2.9833	0.00	0.00			0.00
	0.00				0.00	0.9381
	2.2232					

28YEKK-5872 NIST-STRBASE

	3.6837	0.0000	0.0000	0.0000	0.0000	
	3.4712	0.0000	0.0000	7.2200	0.0000	0.0000
4PI	3.7216	0.0000	0.0000	1.5560		0.0000
	0.0000			0.0000	0.0000	0.9525
	2.4726					

2K6B22-5872 FBI PopStats

	4.4883					
	3.0600			6.7295		
4PI	2.8458			1.3740		
						0.91408
	2.2957					

2QXD62-5872 NIST-STRBASE

	3.6845	0.001	0.0028	0.002	0.001	
	3.4722	0.004	0.0028	7.215	0.002	0.004
4PI	3.723	0.001	0.001	1.5561		0.003
	0.0041			0.0064	0.00001	0.9525
	2.4727					

32CRNU-5872 FBI PopStats, NIST 2017

	3.68	0	0	0	0	
	3.47	0	0	7.21	0	0
4PI	3.72	0	0	1.55		0
	0				0	0.952

3B2FKH-5872 NIST-STRBASE

	3.6846	0	0	0	0	
	3.4722	0	0	7.2150	0	0
4PI	3.7230	0	0	1.5562		0
	0			0	0	0.9526
	2.4728					

3CU9F2-5872 FBI PopStats

	4.4883					
	3.0600			6.7295		
4PI	2.8458			1.3740		
						0.91408
	2.2957					

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

496J9T-5872	FBI PopStats, NIST 2017					
	3.68	0	0	0	0	
	3.47	0	0	7.21	0	0
4PI	3.72	0	0	1.55		0
	0			N/A	0	0.95
	N/A					
4LRTVY-5872	NIST-STRBASE					
	ND	ND	ND	ND	ND	ND
	ND	ND	ND	ND	ND	ND
4PI	ND	ND	ND	ND		ND
	ND	ND	ND	ND	ND	ND
	ND					
64TV9W-5877	NIST-STRBASE					
	3.57	0	0	0	0	
	3.38	0	0	6.56	0	0
4PI	3.60	0	0	1.48		0
	0			0	0	0.938
	2.45					
68T76W-5877	NIST-STRBASE					
	3.57	0	0	0	0	
	3.38	0	0	6.56	0	0
4PI	3.60	0	0	1.48		0
	0			0	0	0.938
	Omitted					
693BHK-5872	FBI PopStats					
	3.685	0	0	0	0	0
	3.472	0	0	7.215	0	0
4PI	3.723	0	0	0		0
	1.556	0	0	0	0	0.9526
	2.473					
6VDCQH-5872	NIST-STRBASE					
	3.68	0	0	0	0	
	3.47	0	0	7.22	0	0
4PI	3.72	0	0	1.56		0
	0	0	0	0	0	0.95
	2.47					
77QVNJ-5872	NIST-STRBASE					
	3.6837	0	0	0	0	
	3.4712	0	0	7.2200	0	0
4PI	3.7216	0	0	1.5560		0
	0	0	0	0	0	0.9525
	2.4726					

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 4PI - Paternity Index Results

7BLMUV-5872	NIST-STRBASE					
	3.51	0	0	0	0	0
	3.02	0	0	10.2	0	0
4PI	3.87	0	0	1.56		0
	0	0	0	0	0	1.07
	2.78					
7YU2QL-5877	NIST-STRBASE					
	3.684					
	3.471			7.220		
4PI	3.722			1.556		
						0.953
	2.473					
AG28UD-5877	NIST-STRBASE					
	3.6846	0.0000	0.0000	0.0000	0.0000	Not Tested
	3.4722	0.0000	0.0000	7.2150	0.0000	0.0000
4PI	3.7230	0.0000	0.0000	1.5562		0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.9526
	Not Reported					
AM82LN-5872	In-house Caucasian Database					
	3.80568E+00	See TPOX	See TPOX	1.58896E-03	5.79507E-06	
	2.74936E+00	1.91178E-03	1.42516E-03	See wVA	1.94281E-03	1.49584E-03
4PI	3.11964E+00	1.47393E-03	2.65896E-03	1.21050E+00		See D5S818
	1.22928E-02			1.89688E-02	2.71512E-04	2.02462E-06
	1.53585E+01					
AQM9AM-5872	FBI PopStats, NIST 2017					
	3.68	0	0	0	0	
	3.47	0	0	7.21	0	0
4PI	3.72	0	0	1.55		0
	0			N/A	0	0.952
	N/A					
AU6Q6D-5877	Laboratory Specific Database					
	4.488	0.000	0.000	0.000	0.000	
	3.060	0.000	0.000	6.729	0.000	0.000
4PI	2.846	0.000	0.000	1.374		0.000
	0.000	0.000	0.000	0.000	0.000	0.914
	2.296					
CMHKJQ-5877	NIST-STRBASE					
	3.57	0	0	0	0	
	3.38	0	0	6.56	0	0
4PI	3.60	0	0	1.48		0
	0			0	0	0.938
	2.45					

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

CNUJFK-5872 FBI PopStats, NIST 2017

	3.68	0	0	0	0	
	3.47	0	0	7.21	0	0
4PI	3.72	0	0	1.55		0
	0			N/A	0	0.952
	N/A					

DEJGUJ-5872 FBI PopStats

	4.4883					
	3.0600			6.7295		
4PI	2.8458			1.3740		
						0.91408
	2.2957					

DH6229-5877 FBI PopStats

	3.5112					
	3.0211			10.163		
4PI	3.8670			1.5581		
						1.0725
	2.7778					

DV6ZP7-5877 [Location Identifying Database]

		0		0	0	
	3.03	0			0	0
4PI	2.98	0	0			0
	0				0	0.94
	2.22					

F8TL97-5872 NIST-STRBASE

	3.6845	0.0010	0.0028	0.0020	0.0010	
	3.4722	0.0040	0.0028	7.2150	0.0020	0.0040
4PI	3.7230	0.0010	0.0010	1.5561		0.0030
	0.00413			0.0064	0.00001	0.9525
	2.4727					

FPCFWA-5872 National Pop. database

	3.7172					
				6.4952		
4PI	2.9927			1.2919		
	2.6124					

FPTVPG-5872 NIST-STRBASE

	3.6846	0		0	0	0
	3.4722	0		7.2150	0	0
4PI	3.7230	0	0			0
	0	0	0		0	0.9526
	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

FYHKM6-5872 NIST-STRBASE

	3.6845	0.0010	0.0028	0.0020	0.0010	
	3.4722	0.0040	0.0028	7.2150	0.0020	0.0040
4PI	3.7230	0.0010	0.0010	1.5561		0.0030
	0.0041			0.0064	0.00001	0.9525
	2.4727					

GHNEU2-5872 NIST-STRBASE

	3.68	0.00	0.00	0.00	0.00	
	3.47	0.00	0.00	7.22	0.00	0.00
4PI	3.72	0.00	0.00	1.55		0.00
	0.00	0.00	0.00		0.00	0.952
	2.47					

GREW8B-5872 NIST-STRBASE

	3.6836	0.0001	0.0082	0.0015	0.0004	
	3.4711	0.0002	0.0012	7.2200	0.0001	0.0017
4PI	3.7216	0.0005	0.0030	1.5560		0.0061
	0.0002			0.0001	0.0001	0.9525
	2.4726					

GZPYTB-5872 NIST-STRBASE

	3.68					
	3.47			7.22		
4PI	3.72			1.56		
						0.95
	2.47					

HWLNBG-5872 [Location Identifying Database]

	3.95	0.00	0.00	0.00	0.00	
	2.79	0.00	0.00	6.52	0.00	0..00
4PI	3.2	0.00	0.00	1.25		0.00
	0.00			0.00		0.94
	2.60					

J3K7KQ-5877 NIST-STRBASE

	2.843	0	0	0	0	0
	4.139	0	0	8.743	0	0
4PI	3.105	0	0	1.174		0
	0	0	0	0	0	1.030
	2.776					

JDRAD3-5877 FBI PopStats

	3.6846					
	3.4722			7.215		
4PI	3.723			1.5562		
						0.95256
	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

JQG7E2-5877	Laboratory specific database					
	4.69	0.0	0.0	0.0	0.0	
	3.08	0.0	0.0	6.63	0.0	0.0
4PI	3.46	0.0	0.0	1.35		0.0
	0.0			0.0	0.0	0.93
	2.82					
LRXAZ4-5872	Local Database					
	6.80					
	2.97			4.25		
4PI	3.87			1.34		
						0.91
	2.40					
LU6RYY-5872	NIST-STRBASE					
	3.6845	0.0010	0.0028	0.0020	0.0010	
	3.4722	0.0040	0.0028	7.2150	0.0020	0.0040
4PI	3.7230	0.0010	0.0010	1.5561		0.0030
	0.0041			0.0064	0.00001	0.9525
	2.4727					
LUEBFM-5877	laboratory specific database					
	3.65	0.0136	0.0276	0.00445	0.00613	
	3.09	0.00345	0.00885	5.75	0.00935	0.00346
4PI	2.95	0.00336	0.0098	1.47		0.0346
	0.0403			0.0335	0.0323	0.951
	2.26					
MK4AUM-5872	NIST-STRBASE					
	2.843	0	0	0	0	0
	4.1390	0	0	8.743	0	0
4PI	3.105	0	0	1.174		0
	0	0	0	0	0	1.030
	2.776					
MM26J6-5872	NIST-STRBASE					
	3.58	0.00	0.00	0.12	0.01	
	2.29	0.21	0.00	18.93	0.00	0.13
4PI	9.65	0.09	0.32			0.63
	0.01	0.03	0.13		0.12	1.80
	3.17					
MXJMCB-5877	FBI PopStats					
	3.51					
	3.02			10.2		
4PI	3.87			1.56		
						1.07
	2.78					

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

NHLXV6-5872 local database

	4.385965	0.000000	0.005	0.000779	0.000185	
	4.032258	0.001641	0.001282	6.097561	0.000023	0.000648
4PI	2.976190	0.000481	0.001632	1.373626		0.003945
	0.000042	0.000214	0.000434	0.000000	0.000112	0.880282
	1.984127					

NQE6GV-5872 NIST-STRBASE

	3.6846					
	3.4722			7.2150		
4PI	3.7230			1.5562		
						0.9526
	2.4728					

Q2R9E6-5872 FBI PopStats, NIST 2017

	3.68					
	3.47			7.21		
4PI	3.72			1.55		
						0.95

QJ8HE7-5872 FBI PopStats, NIST 2017

	3.68	0	0	0	0	
	3.47	0	0	7.21	0	0
4PI	3.72	0	0	1.55		0
	0			N/A	0	0.952
	N/A					

RERAQ7-5872 NIST-STRBASE

	3.512	0		0	0	0
	3.020	0		10.157	0	0
4PI	3.866	0	0			0
	0	0	0		0	1.073
	2.777					

RWC2Q7-5872 NIST-STRBASE

	3.6846	0		0	0	0
	3.4722	0		7.215	0	0
4PI	3.723	0	0			0
	0	0	0		0	0.9526
	2.4728					

TAWX69-5872 NIST-STRBASE

	3.6846	EXCLUSION	EXCLUSION	EXCLUSION	EXCLUSION	EXCLUSION
	3.4722	EXCLUSION	EXCLUSION	7.2165	EXCLUSION	EXCLUSION
4PI	3.7234	EXCLUSION	EXCLUSION	1.5561		EXCLUSION
	EXCLUSION	EXCLUSION	EXCLUSION	EXCLUSION	EXCLUSION	0.9527
	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

VFV2AX-5877 FBI PopStats, NIST/Promega

	3.39	--	--	--	--	
	3.02	--	--	7.31	--	--
4PI	2.85	--	--	1.56		--
	--	--	--		--	0.913
	2.23					

VLM9UR-5877 [Location Identifying Database]

	2.122					
	3.762			9.191		
4PI	2.398			1.880		
						0.904
	2.648					

VVB37N-5872 FBI PopStats

	3.6846	0.0000	0.0000	0.0000	0.0000	
	3.0600	0.0000	0.0000	7.2150	0.0000	0.0000
4PI	2.8818	0.0000	0.0000	1.5562		0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.9141
	2.2533					

W7LWW8-5872 FBI PopStats

	4.4883					
	3.0600			6.7295		
4PI	2.8458			1.3740		
						0.91408
	2.2957					

WR449Z-5872 FBI PopStats, NIST 2017

	3.68					
	3.47			7.21		
4PI	3.72			1.55		
						.95

XMTF94-5877 NIST-STRBASE

	3.57	0.000	0.000	0.000	0.000	
	3.38	0.000	0.000	6.56	0.000	0.000
4PI	3.60	0.000	0.000	1.48		0.000
	0.000			0.000	0.000	0.938
	2.45					

XR3TRN-5872 FBI PopStats, FBI Caucasian

	4.49376E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	
	3.06396E+00	0.00000E+00	0.00000E+00	6.73818E+00	0.00000E+00	0.00000E+00
4PI	2.84944E+00	0.00000E+00	0.00000E+00	1.37661E+00		0.00000E+00
	0.00000E+00			0.00000E+00	0.00000E+00	9.15698E-01
	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

XYGF2R-5877	NIST-STRBASE					
	3.6846	0.0000	0.0000	0.0000	0.0000	0.0000
	3.4722	0.0000	0.0000	7.2150	0.0000	0.0000
4PI	3.7230	0.0000	0.0000	1.5562		0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.9526
	2.4728					
ZGEE2Q-5872	NIST-STRBASE					
	3.68	0	0	0	0	
	3.47	0	0	7.21	0	0
4PI	3.72	0	0	1.55		0
	0	0	0	0	0	0.95
	2.47					
ZPKJP2-5877	NIST-STRBASE					
	3.569	0	0	0	0	
	3.376	0	0	6.556	0	0
4PI	3.604	0	0	1.481		0
	0			0	0	0.9378
	2.452					

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 2 - YSTR Results									
22W96H-5872	Yfiler® Plus								
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
28YEKK-5872	Yfiler® Plus								
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
2QXD62-5872	Yfiler®								
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		
							23		12
2WZGXK-5877	Yfiler® PLUS								
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
36PRKL-5877	Yfiler® PLUS								
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
3EZU7L-5877	Yfiler® plus								
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
3G223J-5877	PowerPlex® Y 23								
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
4LRTVY-5872	PowerPlex® Y 23								
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
6VDCQH-5872	PowerPlex® Y 23								
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		22
		12	12	17	19		23	9	12

TABLE 3

Item 2 - YSTR Results

Item	WebCode-Test / Amplification Kit								
	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
77QVNJ-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
7BLMUV-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
93MK6P-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
9N7PPT-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
AM82LN-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
C3AGKL-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
CFHZJF-5877		Yfiler®							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
CMHKJQ-5877		Yfiler®							
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		
							23		12
DH6229-5877		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
EF96PK-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12

TABLE 3

Item 2 - YSTR Results

Item	WebCode-Test / Amplification Kit	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
F8TL97-5872	Yfiler®		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		
								23		12
FYHKM6-5872	Yfiler®		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		
								23		12
GM2WBJ-5872	Yfiler®		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		
								23		12
GNCYWH-5872	Yfiler®		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		
								23		12
GREW8B-5872	PowerPlex® Y 23		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		22
			12	12	17	19		23	9	12
GZPYTB-5872	PowerPlex® Y 23		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		22
			12	12	17	19		23	9	12
H6EVV8-5872	Yfiler®		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		
								23		12
HJFUJ4-5872	PowerPlex® Y 23		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		22
			12	12	17	19		23	9	12
J3K7KQ-5877	Argus Y12		14	11,15	13	29	24	10	13	13
2		14	12	12						
JDRAD3-5877	Yfiler® Plus	36,37	14	11,15	13	29	24	10	13	13
2		14	12	12	19	29	16	17	11	22
		39	12		17	19	22	23		12

TABLE 3

Item 2 - YSTR Results

Item	WebCode-Test / Amplification Kit	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
LRXAZ4-5872	PowerPlex® Y 23 System		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		22
			12	12	17	19		23	9	12
LU6RYY-5872	Yfiler®		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		
								23		12
LUEBFM-5877	PowerPlex® Y 23		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		22
			12	12	17	19		23	9	12
MFPURD-5872	Yfiler®		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		
								23		12
MK4AUM-5872			14	11,15	13	29	24	10	13	13
2		14	12	12						
MM26J6-5872	PowerPlex® Y		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		22
			12	12	17	19		23	9	12
N9W7AC-5872	Yfiler® Plus	36,37	14	11,15	13	29	24	10	13	13
2		14	12	12	19	29	16	17	11	22
		39	12		17	19	22	23		12
NHLXV6-5872			14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		22
			12	12	17	19		23	9	12
NZ7NV4-5872	Yfiler®		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		
								23		12
P4Y6K4-5872	PowerPlex® Y 23 System		14	11,15	13	29	24	10	13	13
2		14	12	12	19		16	17		22
			12	12	17	19		23	9	12

TABLE 3

Item 2 - YSTR Results

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
RERAQ7-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
TAWX69-5872		Yfiler® PLUS, PowerPlex® Y 23							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12	12	17	19	22	23	9	12
VFV2AX-5877		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
VLM9UR-5877		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
VVB37N-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
W763VX-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
XYGF2R-5877		Yfiler®							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
YETBUT-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
Z47XTZ-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
ZGEE2Q-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
2	14	12	12	19		16	17		22
		12	12	17	19		23	9	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 2 - YSTR Results									
ZZ6PNQ-5877	Yfiler® plus								
	36,37	14	11,15	13	29	24	10	13	13
2	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12

TABLE 3

Item 3 - YSTR Results

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
22W96H-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
28YEKK-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
2QXD62-5872		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12
2WZGXK-5877		Yfiler® PLUS							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
36PRKL-5877		Yfiler® PLUS							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
3EZU7L-5877		Yfiler® plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
3G223J-5877		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
4LRTVY-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
6VDCQH-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
77QVNJ-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	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									
7BLMUV-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
93MK6P-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
9N7PPT-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
AM82LN-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
C3AGKL-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
CFHZJF-5877		Yfiler®							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
CMHKJQ-5877		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12
DH6229-5877		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
EF96PK-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
F8TL97-5872		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12

TABLE 3

Item 3 - YSTR Results

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
FYHKM6-5872		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12
GM2WBJ-5872		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12
GNCYWH-5872		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12
GREW8B-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
GZPYTB-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
H6EVV8-5872		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12
HJFUJ4-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
J3K7KQ-5877		Argus Y12							
		14	11,15	13	29	24	10	13	13
3	14	12	12						
JDRAD3-5877		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
LRXAZ4-5872		PowerPlex® Y 23 System							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12

TABLE 3

Item 3 - YSTR Results

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
LU6RYY-5872		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12
LUEBFM-5877		PowerPlex® Y							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
MFPURD-5872		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12
MK4AUM-5872		Argus Y12							
		14	11,15	13	29	24	10	13	13
3	14	12	12						
MM26J6-5872		PowerPlex® Y							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
N9W7AC-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
NHLXV6-5872									
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
NZ7NV4-5872		Yfiler®							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		
							23		12
P4Y6K4-5872		PowerPlex® Y 23 System							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
RERAQ7-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12

TABLE 3

Item 3 - YSTR Results

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
TAWX69-5872		Yfiler® PLUS, PowerPlex® Y 23							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12	12	17	19	22	23	9	12
VFV2AX-5877		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
VLM9UR-5877		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
VVB37N-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
W763VX-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
XYGF2R-5877		Yfiler®							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
YETBUT-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
Z47XTZ-5872		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12
ZGEE2Q-5872		PowerPlex® Y 23							
		14	11,15	13	29	24	10	13	13
3	14	12	12	19		16	17		22
		12	12	17	19		23	9	12
ZZ6PNQ-5877		Yfiler® Plus							
	36,37	14	11,15	13	29	24	10	13	13
3	14	12	12	19	29	16	17	11	22
	39	12		17	19	22	23		12

TABLE 3

Item 4 - YSTR Results

Item	WebCode-Test / Amplification Kit	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
	22W96H-5872		Yfiler® Plus							
		36,38	16	11,14	13	31	25	10	11	13
4		14	11	10	20	30	14	14	10	24
		41	12		20	20	17	23		12
	28YEKK-5872		Yfiler® PLUS							
		36,38	16	11,14	13	31	25	10	11	13
4		14	11	10	20	30	14	14	10	24
		41	12		20	20	17	23		12
	2QXD62-5872		Yfiler®							
			16	11,14	13	31	25	10	11	13
4		14	11	10	20		14	14		
								23		12
	2WZGXK-5877		Yfiler® PLUS							
		36,38	16	11,14	13	31	25	10	11	13
4		14	11	10	20	30	14	14	10	24
		41	12		20	20	17	23		12
	36PRKL-5877		Yfiler® PLUS							
		36,38	16	11,14	13	31	25	10	11	13
4		14	11	10	20	30	14	14	10	24
		41	12		20	20	17	23		12
	3EZU7L-5877		Yfiler® plus							
		36,38	16	11,14	13	31	25	10	11	13
4		14	11	10	20	30	14	14	10	24
		41	12		20	20	17	23		12
	3G223J-5877		PowerPlex® Y 23							
			16	11,14	13	31	25	10	11	13
4		14	11	10	20		14	14		24
			12	12	20	20		23	10	12
	4LRTVY-5872		PowerPlex® Y 23							
			16	11,14	13	31	25	10	11	13
4		14	11	10	20		14	14		24
			12	12	20	20		23	10	12
	6VDCQH-5872		PowerPlex® Y 23							
			16	11,14	13	31	25	10	11	13
4		14	11	10	20		14	14		24
			12	12	20	20		23	10	12
	77QVNJ-5872		PowerPlex® Y 23							
			16	11,14	13	31	25	10	11	13
4		14	11	10	20		14	14		24
			12	12	20	20		23	10	12

TABLE 3

Item 4 - YSTR Results

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
7BLMUV-5872		PowerPlex® Y 23							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
93MK6P-5872		Yfiler® Plus							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
9N7PPT-5872		Yfiler® Plus							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
AM82LN-5872		Yfiler® Plus							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
C3AGKL-5872		Yfiler® Plus							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
CFHZJF-5877		Yfiler®							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
CMHKJQ-5877		Yfiler®							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		
							23		12
DH6229-5877		Yfiler® Plus							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
EF96PK-5872		Yfiler® Plus							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
F8TL97-5872		Yfiler®							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		
							23		12

TABLE 3

Item 4 - YSTR Results

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
FYHKM6-5872		Yfiler®							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		
							23		12
GM2WBJ-5872		Yfiler®							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		
							23		12
GNCYWH-5872		Yfiler®							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		
							23		12
GREW8B-5872		PowerPlex® Y 23							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
GZPYTB-5872		PowerPlex® Y 23							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
H6EVV8-5872		Yfiler®							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		
							23		12
HJFUJ4-5872		PowerPlex® Y 23							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
J3K7KQ-5877		ArgusY12							
		16	11,14	13	31	25	10	11	13
4	14	11	10						
JDRAD3-5877		Yfiler® Plus							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
LRXAZ4-5872		PowerPlex® Y 23 System							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12

TABLE 3

Item 4 - YSTR Results

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
LU6RYY-5872		Yfiler®							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		
							23		12
LUEBFM-5877		PowerPlex® Y							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
MFPURD-5872		Yfiler®							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		
							23		12
MK4AUM-5872		Argus Y12							
		16	11,14	13	31	25	10	11	15
4	14	11	10						
MM26J6-5872		PowerPlex® Y							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
N9W7AC-5872		Yfiler® Plus							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
NHLXV6-5872									
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
NZ7NV4-5872		Yfiler®							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		
							23		12
P4Y6K4-5872		PowerPlex® Y 23 System							
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
RERAQ7-5872		Yfiler® Plus							
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12

TABLE 3

Item 4 - YSTR Results

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
TAWX69-5872	Yfiler® PLUS, PowerPlex® Y 23								
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12	12	20	20	17	23	10	12
VFV2AX-5877	PowerPlex® Y 23								
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
VLM9UR-5877	Yfiler® Plus								
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
VVB37N-5872	PowerPlex® Y 23								
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
W763VX-5872	PowerPlex® Y 23								
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
XYGF2R-5877	Yfiler®								
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
YETBUT-5872	Yfiler® Plus								
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
Z47XTZ-5872	Yfiler® Plus								
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12
ZGEE2Q-5872	PowerPlex® Y 23								
		16	11,14	13	31	25	10	11	13
4	14	11	10	20		14	14		24
		12	12	20	20		23	10	12
ZZ6PNQ-5877	Yfiler® PLUS								
	36,38	16	11,14	13	31	25	10	11	13
4	14	11	10	20	30	14	14	10	24
	41	12		20	20	17	23		12

Additional DNA & PI Results

TABLE 4

Locus	WebCode-Test	Item 1	Item 2	Item 3	Item 3 PI	Item 4	Item 4 PI
D10S2325	NHLXV6-5872	10,15	10,11	10,11	3.521127	9,13	0.000176
D21S2055	NHLXV6-5872	16.1,35	16.1,32	19.1,32	19.230769	27,33	0.009615
D2S1360	NHLXV6-5872	21,22	22,26	21,26	5.376344	22,24	0.000269
D3S1744	NHLXV6-5872	17	17	17,18	1.567398	16	0.000784
D4S2366	NHLXV6-5872	11,13	13,14	9,14	6.756757	12	0.000338
D5S2500	NHLXV6-5872	13,14	11,14	11,15	1.597444	11,13	1.597444
D6S474	NHLXV6-5872	15,16	13,16	13,16	2.024291	13	4.048583
D7S1517	NHLXV6-5872	22,24	24,25	25	4.347826	20,25	2.173913
D8S1132	NHLXV6-5872	21	21,22	17,22	3.759398	17,21	0.001880
DYS385A	MM26J6-5872		11	11		11	
DYS385B	MM26J6-5872		15	15		14	
F13A01	4LRTVY-5872	5,6	5,7	7	3,26	6,7	ND
	693BHK-5872	5,6	5,7	7	3.167	6,7	1.583
	7BLMUV-5872	5,6	5,7	7	4.06	6,7	2.03
	NHLXV6-5872	5,6	5,7	7	2.808989	6,7	1.404494
F13B	4LRTVY-5872	6,7	7,9	9	4,33	8,9	ND
	693BHK-5872	6,7	7,9	9	4.057	8,9	2.028
	7BLMUV-5872	6,7	7,9	9	4.31	8,9	2.15
	NHLXV6-5872	6,7	7,9	9	4.009623	8,9	2.004812
FES/FPS	693BHK-5872	11	11,12	10,12	2.123	10,12	2.123
FESFPS	4LRTVY-5872	11	11,12	10,12	2,29	10,12	ND
	7BLMUV-5872	11	11,12	10,12	2.12	10,12	2.12
	NHLXV6-5872	11	11,12	10,12	2.648305	10,12	2.648305
LPL	4LRTVY-5872	10,12	10	10,12	1,04	10,11	ND
	693BHK-5872	10,12	10	10,12	1.184	10,11	1.184
	7BLMUV-5872	10,12	10	10,12	1.16	10,11	1.16
	NHLXV6-5872	10,12	10	10,12	1.2444	10,11	1.244400
PENTA C	4LRTVY-5872	11,13	11,13	11	2,30	9,11	ND
	693BHK-5872	11,13	11,13	11	1.861	9,11	0.9304
	7BLMUV-5872	11,13	11,13	11	2.28	9,11	1.14
	NHLXV6-5872	11,13	11,13	11	1.760563	9,11	0.880282

Paternity DNA Statistics & Conclusions

TABLE 5

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
22W96H-5872	Item 3 - Alleged Father A	47,757,882	99.999998	[Location Identifying Database]
28YEKK-5872	Item 3 - Alleged Father A	4.3339E+11	99.99999999%	NIST-STRBASE
2K6B22-5872	Item 3 - Alleged Father A	3E11	lab does not report	FBI PopStats
2QXD62-5872	Item 3 - Alleged Father A	4.3394E+11	99.9999%	NIST-STRBASE
2WZGXK-5877	Item 3 - Alleged Father A	75,529,661.265	99.999%	NIST-STRBASE
32CRNU-5872	Item 3 - Alleged Father A	12,630,000,000	99.9999%	FBI PopStats, NIST 2017
36PRKL-5877	Item 3 - Alleged Father A		>0.9999999999	STR Database downloaded from Promega
3B2FKH-5872	Item 3 - Alleged Father A	433,940,482,323	99.9999%	NIST-STRBASE
3CU9F2-5872	Item 3 - Alleged Father A	3E11		FBI PopStats
3EZU7L-5877	Item 3 - Alleged Father A	2,149605519*10^11	0,99999999999534	laboratory specific database
3G223J-5877	Item 3 - Alleged Father A	1,96e+012	99,99999999 %	STRidER
496J9T-5872	Item 3 - Alleged Father A	12,630,000,000	99.9999%	FBI PopStats, NIST 2017
4LRTVY-5872	Item 3 - Alleged Father A	3.311.699.653.056.180	99,9999999999999999%	NIST-STRBASE
64TV9W-5877	Item 3 - Alleged Father A	24,000,000,000		NIST-STRBASE
68T76W-5877	Item 3 - Alleged Father A	34,000,000,000		NIST-STRBASE
693BHK-5872	Item 3 - Alleged Father A	9.460E+03	99.99%	FBI PopStats
6P9F6X-5872	Item 3 - Alleged Father A	443,000,000,000	99.999999999774	FBI PopStats
6VDCQH-5872	Item 3 - Alleged Father A	2,758,589,559,174	99.99%	NIST-STRBASE
73CYGW-5872	Item 3 - Alleged Father A	55 billion	99.9999%	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
77QVNJ-5872	Item 3 - Alleged Father A	2755684724578.86	99.999999999964	NIST-STRBASE
7BLMUV-5872	Item 3 - Alleged Father A	3505823814000000	99.99999999	NIST-STRBASE
7YU2QL-5877	Item 3 - Alleged Father A	396,780,183,313	99.9999999997%	NIST-STRBASE
8D9NCN-5872	Item 3 - Alleged Father A			FBI PopStats
93MK6P-5872	Item 3 - Alleged Father A	82,710,000,000	> 99.99%	FBI PopStats
9D2WXD-5872	Item 3 - Alleged Father A			
9N7PPT-5872	Item 3 - Alleged Father A	82,710,000,000	>99.99%	FBI PopStats
ACKZ7D-5877	Item 3 - Alleged Father A	50,740,000,000	99.999999998029%	FBI PopStats
AG28UD-5877	Item 3 - Alleged Father A	557.7 billion	99.9999%	NIST-STRBASE
AM82LN-5872	Item 3 - Alleged Father A	1.23533E+11		In-house Caucasian Database
AQM9AM-5872	Item 3 - Alleged Father A	12,630,000,000	99.9999%	FBI PopStats, NIST 2017
AU6Q6D-5877	Item 3 - Alleged Father A	3.3 trillion	99.99%	Laboratory Specific Database
C3AGKL-5872	Item 3 - Alleged Father A	3.567x10^11	>99.999%	laboratory specific database
CFHZJF-5877	Item 3 - Alleged Father A	200 903 169,8	99,999999502248%	[Location Identifying Database]
CMHKJQ-5877	Item 3 - Alleged Father A	24 billion		NIST-STRBASE
CNUJFK-5872	Item 3 - Alleged Father A	12,630,000,000	99.9999%	FBI PopStats, NIST 2017
DEJGUJ-5872	Item 3 - Alleged Father A	3.3160E12	>99.9999999999	FBI PopStats
DH6229-5877	Item 3 - Alleged Father A	1,245,000,000,000	>99.9999999999	FBI PopStats
DV6ZP7-5877	Item 3 - Alleged Father A	47,757,870	99.99%	[Location Identifying Database]
EF96PK-5872	Item 3 - Alleged Father A	82.71 billion	>99.99%	FBI PopStats

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
EWGWRP-5872	Item 3 - Alleged Father A	1.2 X 10^11	99.9999	NIST-STRBASE
F8TL97-5872	Item 3 - Alleged Father A	4.3394 E+11	99.9999%	NIST-STRBASE
FPCFWA-5872	Item 3 - Alleged Father A	271332827	99.99999963	National Pop. database
FPTVPG-5872	Item 3 - Alleged Father A	2.583e10		NIST-STRBASE
FYHKM6-5872	Item 3 - Alleged Father A	4.3394E+11	99.9999%	NIST-STRBASE
GHNEU2-5872	Item 3 - Alleged Father A	400,000,000,000	99.9%	NIST-STRBASE
GM2WBJ-5872	Item 3 - Alleged Father A	55 billion	99.9999%	NIST-STRBASE
GNCYWH-5872	Item 3 - Alleged Father A	55 billion	99.9999	NIST-STRBASE
GREW8B-5872	Item 3 - Alleged Father A	433,395,340,083	99.9999999997%	NIST-STRBASE
GZPYTB-5872	Item 3 - Alleged Father A	3.9706E+11	99.9999%	NIST-STRBASE
H6EVV8-5872	Item 3 - Alleged Father A	397 billion	99.9%	NIST-STRBASE
H87UA6-5877	Item 3 - Alleged Father A	50,740,000,000	99.999999998029%	FBI PopStats
HJFUJ4-5872	Item 3 - Alleged Father A	4.45*10^11	99.99%	FBI PopStats
HWLNBG-5872	Item 3 - Alleged Father A	356,320,837,760	99.9999999997%	[Location Identifying Database]
J3K7KQ-5877	Item 3 - Alleged Father A	2.091084652e+014	>0.9999999999	NIST-STRBASE
JA7P7D-5872	Item 3 - Alleged Father A	514,000,000,000		NIST-STRBASE
JDRAD3-5877	Item 3 - Alleged Father A	1.245E+12	>99.9999999999	FBI PopStats
JK6HE6-5877	Item 3 - Alleged Father A	1.273e+012	>0.9999999	NIST STRBASE Pop. Caucasian
JQG7E2-5877	Item 3 - Alleged Father A	3.89e+011	99.999999999%	Laboratory specific database
JRAYAK-5872	Item 3 - Alleged Father A	60.1 billion	99.999999998337	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
LRXAZ4-5872	Item 3 - Alleged Father A	4.359E+12	>99.999999%	Local Database
LU6RYY-5872	Item 3 - Alleged Father A	4.3394E+11	99.9999%	NIST-STRBASE
LUEBFM-5877	Item 3 - Alleged Father A	2.4e^11	99.999999999%	laboratory specific database
LUP9E2-5877	Item 3 - Alleged Father A			
M2HZZZ-5877	Item 3 - Alleged Father A	50,740,000,000	99.999999998029%	FBI PopStats
MDDEXC-5872	Item 3 - Alleged Father A	55 billion	99.9999%	NIST-STRBASE
MFPURD-5872	Item 3 - Alleged Father A	55,000,000,000	99.9999%	NIST-STRBASE
MJKHA7-5872	Item 3 - Alleged Father A	100000000	99.99%	NDSD - National DNA Statistics Database
MK4AUM-5872	Item 3 - Alleged Father A	2.091084652e+014	>0.9999999999	NIST-STRBASE
MM26J6-5872	Item 3 - Alleged Father A	184950322284267	99.99	NIST-STRBASE
MXJMCB-5877	Item 3 - Alleged Father A	1.2450E+12	>99.9	FBI PopStats
N2ZCBE-5877	Item 3 - Alleged Father A	60,140,000,000	99.9999	NIST-STRBASE
N9W7AC-5872	Item 3 - Alleged Father A	82.71 billion	>99.99%	FBI PopStats
NHLXV6-5872	Item 3 - Alleged Father A	7,02080159036521E19	99,99999999999999999%	local database
NQE6GV-5872	Item 3 - Alleged Father A	433,940,482,323	99.9999%	NIST-STRBASE
NZ7NV4-5872	Item 3 - Alleged Father A	397 billion	99.9%	NIST-STRBASE
P3RPDX-5877	Item 3 - Alleged Father A	5.6E11		NIST-STRBASE
P4Y6K4-5872	Item 3 - Alleged Father A	198,786,518.631	0.99999999 (99.99%)	Estatal (Local database)
Q2R9E6-5872	Item 3 - Alleged Father A	12,630,000,000	99.9999%	FBI PopStats, NIST 2017
QJ8HE7-5872	Item 3 - Alleged Father A	12630000000	99.9999%	FBI PopStats, NIST 2017

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
RERAQ7-5872	Item 3 - Alleged Father A	>100 billion	NA	NIST-STRBASE
RKZQZV-5872	Item 3 - Alleged Father A	1.2957e+12	99.99999999%	NIST-STRBASE
RWC2Q7-5872	Item 3 - Alleged Father A	2.583E+010		NIST-STRBASE
TAWX69-5872	Item 3 - Alleged Father A	5868015601572	99.99999999%	NIST-STRBASE
TCHHCX-5872	Item 3 - Alleged Father A	2.0E+020	99.999999999999999999	NIST-STRBASE, [Location Identifying Database]
VFV2AX-5877	Item 3 - Alleged Father A	310,000,000,000	99.99999999%	FBI PopStats, NIST/Promega
VLM9UR-5877	Item 3 - Alleged Father A	342744824809	99.999999999%	[Location Identifying Database]
VVB37N-5872	Item 3 - Alleged Father A	3,816,965,951,796.5200	99.9999%	FBI PopStats
W763VX-5872	Item 3 - Alleged Father A	6.183315459e+014	>99.99999999%	Software Familias v3.3.1 (using national allele frequencies)
W7LWW8-5872	Item 3 - Alleged Father A	3 x 10^11	Does Not Report	FBI PopStats
WR449Z-5872	Item 3 - Alleged Father A	12,630,000,000	99.9999	FBI PopStats, NIST 2017
WUBL8W-5872	Item 3 - Alleged Father A	1.7E+018	>99.9999%	[Location Identifying Database]
XMTF94-5877	Item 3 - Alleged Father A	24,000,000,000		NIST-STRBASE
XR3TRN-5872	Item 3 - Alleged Father A	3.89E+11	99.999999999743	FBI PopStats, FBI Caucasian
XYGF2R-5877	Item 3 - Alleged Father A	5.824 E+12	99.9999%	NIST-STRBASE
XZTEV2-5872	Item 3 - Alleged Father A	55 billion	99.9999%	NIST-STRBASE
YETBUT-5872	Item 3 - Alleged Father A	8.76E10		NIST-STRBASE
Z47XTZ-5872	Item 3 - Alleged Father A	82.71 billion	>99.99%	FBI PopStats
ZGEE2Q-5872	Item 3 - Alleged Father A	2758589559173.69	99.99999999996%	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
ZPKJP2-5877	Item 3 - Alleged Father A	24 billion		NIST-STRBASE
ZZ6PNQ-5877	Item 3 - Alleged Father A	6.7 E10	>0.999999	[Location Identifying Database]

Paternity DNA Statistics Response Summary	Participants: 100
Which of the alleged fathers cannot be excluded as the biological parent of Item 2?	
Responses: Item 3 - Alleged Father A	100
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	28YEKK-5872	(1+2p+pp)/4pp	p=17.3	14.9889
	2QXD62-5872	(1+2p+pp)/4pp	p=17.3	14.9888
	2WZGXK-5877	R=1(k2)+a(k1)+a(k1)+a2(ko) U=a2SI=R/U	a= 17.3	14.986
	3B2FKH-5872	(1+2p+pp)/4pp	p = 17.3	14.9889
	4LRTVY-5872	$(p+1)^2/4p^2$	p=17.3	14.98
	64TV9W-5877			11.89
	68T76W-5877			11.89
	693BHK-5872	(1+2a+2a^2)/4a^2	a = 17.3	14.99
	6VDCQH-5872	[(1+a)^2]/(2a)^2	A=17.3	14.9889
	73CYGW-5872	(1+p)(1+p)/4(p)(p)	p=17.3	14.99
	77QVNJ-5872	((p)^2+2p+1)/(2p)^2	p = 17.3	14.9889
	7BLMUV-5872	(p+1)^2/4p^2	p=17.3	14.99
	93MK6P-5872	((1+p)^2)/((2p)^2)	p = 17.3	14.989
	9N7PPT-5872	(1+p)^2/(2p)^2	p=17.3	14.989
	AG28UD-5877	(1+2p+pp)/4pp	p = 17.3	14.9889
	AU6Q6D-5877	(1+a)^2/(2a)^2	a=17.3	14.9888
	CMHKJQ-5877	*	*	11.89
	DH6229-5877	(1+2p+p2)/4p2	p=17.3	14.989
	EF96PK-5872	(1+p)^2/(2p)^2	p=17.3	14.989
	EWGWRP-5872	((1+p)^2)/(4p^2)	p=17.3	14.9889
	F8TL97-5872	(1+2p+pp)/4pp	p=17.3	14.9888
	FPCFWA-5872	(1+p)^2/4p^2	p=17.3	14.989
	FYHKM6-5872	(1+2p+pp)/4pp	p=17.3	14.9888
	GM2WBJ-5872	(1+p)^2/4p^2	p=17.3	14.99
	GNCYWH-5872	[(1+p)^2]/4p^2	p=17.3	14.99
	GREW8B-5872			14.9880
	HJFUJ4-5872	(1+p)/2p	p=17.3	3.87
	J3K7KQ-5877	((a+1)^2)/(4a^2)	a=0.1483	14.9888

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D1S1656	JDRAD3-5877	(1+2p+p2)/4p2	p=17.3	14.989
	JK6HE6-5877	(1+2p+pp)/4pp	p=17.3	14.989
	LRXAZ4-5872	(1+p)2/(2p)2	p=17.3	14.9889
	LU6RYY-5872	(1+2p+pp)/4pp	p=17.3	14.9888
	LUEBFM-5877	2p(1+p)/(2P)^2	p=17.3	3.87
	MDDEXC-5872	(1+p)2/4p2	p=17.3	14.99
	MFPURD-5872	(1+p)^2/4p^2	p=17.3	14.99
	MK4AUM-5872	((a+1)^2)/(4a^2)	a=0.1483	14.9888
	MXJMCB-5877	(1+p)^2:(2p)^2	p = 17.3	14.99
	N9W7AC-5872	[(1+p)^2]/[(2p)^2]	p=17.3	14.989
	NHLXV6-5872	(1+p)2/(2p)2	p=17.3	14.98885424
	NQE6GV-5872	(1+2p+pp)/4pp	p=17.3	14.9889
	RERAQ7-5872	1	a=17.3	14.99
	TAWX69-5872	(p+1)^2/4p^2	p = 17.3	14.9889
	VFV2AX-5877	(1+2p+pp)/4pp	p = 17.3	14.9889
	VLM9UR-5877	[(1+p)/2p]^2	p=17.3	14.9889
	VVB37N-5872	(1+2p+pp)/(4pp)	p=17.3	14.9889
	XMTF94-5877			11.89
	XR3TRN-5872	(1+P)^2	17.3	1.31859289
	XYGF2R-5877	(1+2p+pp)/4pp	p=17.3	14.9889
	XZTEV2-5872	(1+p)^2/4p^2	p=17.3	14.99
	Z47XTZ-5872	(1+p)^2/(2p)^2	p = 17.3	14.989
	ZGEE2Q-5872	(1+p)^2/4(p^2)	p = 17.3	0.007249917
	ZPKJP2-5877			11.89
	ZZ6PNQ-5877	(p+q+4pq)/8pq	p=q=17.3	2.185772084

Statistical Analysis Summary of D1S1656 **Likelihood Ratio Mode: 14.9889**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S1338	28YEKK-5872	1/4		0.2500
	2QXD62-5872	1/4		0.2500
	2WZGXK-5877	R=2cd(ko)U=2cdSI=R/U	c=17 d=33	0.25
	3B2FKH-5872	1/4		0.2500
	4LRTVY-5872	1/4	ND	0.2500
	64TV9W-5877			0.2500
	68T76W-5877			0.2500
	693BHK-5872	1/2		0.2500
	6VDCQH-5872			0.2500
	73CYGW-5872	0.5pq/2pq	p=17 q=23	0.2500
	77QVNJ-5872	(pqrs)/4(pqrs)	p=17 q=20 r=22 s=23	0.25
	7BLMUV-5872	1/4		0.25
	93MK6P-5872	1/4	----	0.25000
	9N7PPT-5872	1/4		0.2500
	AG28UD-5877	1/4		0.2500
	AU6Q6D-5877	1/4		0.25
	CMHKJQ-5877	*	*	0.2500
	DH6229-5877	1/4		0.25000
	EF96PK-5872	1/4		0.25000
	EWGWRP-5872	1/4	-	0.2500
	F8TL97-5872	1/4		0.25
	FPCFWA-5872	1/4		0.250
	FYHKM6-5872	1/4		0.2500
	GM2WBJ-5872	1/4		0.2500
	GNCYWH-5872	1/4		0.2500
	GREW8B-5872			0.2500
	HJFUJ4-5872	0.5		0.5
	J3K7KQ-5877	1/4	0.25	0.25
	JDRAD3-5877	1/4		0.25
	JK6HE6-5877	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S1338	LRXAZ4-5872	1/4		0.25
	LU6RYY-5872	1/4		0.2500
	LUEBFM-5877	2/4	/	0.5
	MDDEXC-5872	rs/2/2rs	r=17 s=23	0.2500
	MFPURD-5872	1/4		0.2500
	MK4AUM-5872	1/4	0.25	0.25
	MXJMCB-5877	1:4		0.250
	N9W7AC-5872	1/4		0.25000
	NHLXV6-5872	1/4		0.25
	NQE6GV-5872	1/4		.2500
	RERAQ7-5872	Z0		0.2500
	TAWX69-5872	1/4	p = 17 q = 20 r = 22 s = 23	0.2500
	VFV2AX-5877	1/4	--	0.2500
	VLM9UR-5877	0.25		0.2500
	VVB37N-5872	1/4		0.25
	XMTF94-5877			0.2500
	XR3TRN-5872	1		1
	XYGF2R-5877	0.25		0.25
	XZTEV2-5872	1/4		0.2500
	Z47XTZ-5872	1/4		0.25
	ZGEE2Q-5872	0.25	-	0.25
	ZPKJP2-5877			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	28YEKK-5872	(1+2p)/8p	p=11	0.6685
	2QXD62-5872	(1+2p)/8p	p=11	0.6684
	2WZGXK-5877	R=c(k1)+2ac(ko)U=2acSI=R/U	a=11 c=16	0.666
	3B2FKH-5872	(1+2p)/8p	p = 11	0.6685
	4LRTVY-5872	(2p+1)/8p	p=11	0.6684
	64TV9W-5877			0.6676
	68T76W-5877			0.6676
	693BHK-5872	(1+2a)/8a	a = 11	0.6685
	6VDCQH-5872	(1+2a)/8a	A=11	0.6685
	73CYGW-5872	(1+2p)/8p	p=11	0.6685
	77QVNJ-5872	(2p+1)/8p	p = 11	0.6685
	7BLMUV-5872	(2p+1)/8p	p=11	0.6685
	93MK6P-5872	(1+2p)/(8p)	p = 11	0.66848
	9N7PPT-5872	(1+2p)/8p	p=11	0.66848
	AG28UD-5877	(1+2q)/8q	q = 11	0.6685
	AU6Q6D-5877	(1+2a)/8a	a=11	0.6684
	CMHKJQ-5877	*	*	0.6676
	DH6229-5877	(1+2p)/8p	p=11	0.66848
	EF96PK-5872	(1+2p)/8p	p=11	0.66848
	EWGWRP-5872	(1+2p)/(8p)	p=11	0.6685
	F8TL97-5872	(1+2q)/8q	q=11	0.6684
	FPCFWA-5872	1+2p/8p	p=11	0.668
	FYHKM6-5872	(1+2q)/8q	q=11	0.6684
	GM2WBJ-5872	(1+2p)/8p	p=11	0.6685
	GNCYWH-5872	(1+2p)/8p	p=11	0.6685
	GREW8B-5872			0.6684
	HJFUJ4-5872	(1+4p)/8p	p=11	0.92
	J3K7KQ-5877	(2a+1)/8a	a=0.2987	.6684
	JDRAD3-5877	(1+2p)/8p	p=11	0.66848

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S441	JK6HE6-5877	(1+2p)/8p	p=11	0.6685
	LRXAZ4-5872	(1+2p)/8p	p=11	0.6685
	LU6RYY-5872	(1+2q)/8q	q=11	0.6684
	LUEBFM-5877	(1+4p)/8p	p=11	0.918
	MDDEXC-5872	(1+2p)/8p	p=11	0.6685
	MFPURD-5872	(1+2p)/8p	p=11	0.6685
	MK4AUM-5872	(2a+1)/8a	a=0.2987	0.6684
	MXJMCB-5877	(1+2p):8p	p = 11	0.6684
	N9W7AC-5872	(1+2p)/(8p)	p=11	0.66848
	NHLXV6-5872	1+2p/8p	p=11	0.66848008
	NQE6GV-5872	(1+2p)/8p	p=11	0.6685
	RERAQ7-5872	5	a=11	0.6685
	TAWX69-5872	(2p+1)/8p	p = 11	0.6685
	VFV2AX-5877	(1+2q)/8q	q = 11	0.6685
	VLM9UR-5877	(1+2p)/8p	p=11	0.6685
	VVB37N-5872	(1+2q)/(8q)	q=11	0.6685
	XMTF94-5877			0.6676
	XR3TRN-5872	1+2P	11	1.5974
	XYGF2R-5877	(1+2p)/8p	p=11	0.6685
	XZTEV2-5872	(1+2p)/8p	p=11	0.6685
	Z47XTZ-5872	(1+2p)/8p	p = 11	0.66848
	ZGEE2Q-5872	(1+2p)/8p	p = 11	0.059642923
	ZPKJP2-5877			0.6676
	ZZ6PNQ-5877	(1+4p)/8p	p=11	0.91848008
Statistical Analysis Summary of D2S441			**Likelihood Ratio Mode:**	**0.6685**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D3S1358	28YEKK-5872	(1+2p)/8p	p=18	1.2671
	2QXD62-5872	(1+2p)/8p	p=18	1.2670
	2WZGXK-5877	R=c(k1)+2ac(ko)U=2acSI=R/U	a=18 c=16	1.267
	3B2FKH-5872	(1+2p)/8p	p = 18	1.2671
	4LRTVY-5872	(2p+1)/8p	p=18	1.267
	64TV9W-5877			1.218
	68T76W-5877			1.218
	693BHK-5872	(1+2a)/8a	a = 18	1.267
	6VDCQH-5872	(1+2a)/8a	A=18	1.2671
	73CYGW-5872	(1+2q)/8q	q=18	1.267
	77QVNJ-5872	(2p+1)/8p	p = 18	1.2671
	7BLMUV-5872	(2p+1)/8p	p=18	1.267
	93MK6P-5872	(1+2p)/(8p)	p = 18	1.2671
	9N7PPT-5872	(1+2p)/8p	p=18	1.2671
	AG28UD-5877	(1+2q)/8q	q = 18	1.2671
	AU6Q6D-5877	(1+2a)/8a	a=18	1.2670
	CMHKJQ-5877	*	*	1.218
	DH6229-5877	(1+2p)/8p	p=18	1.2671
	EF96PK-5872	(1+2p)/8p	p=18	1.2671
	EWGWRP-5872	(1+2p)/(8p)	p=18	1.2671
	F8TL97-5872	(1+2s)/8s	s=18	1.2670
	FPCFWA-5872	1+2p/8p	p=18	1.267
	FYHKM6-5872	(1+2s)/8s	s=18	1.2670
	GM2WBJ-5872	(1+2p)/8p	p=18	1.267
	GNCYWH-5872	(1+2p)/8p	p=18	1.267
	GREW8B-5872			1.2672
	HJFUJ4-5872	(1+4p)/8p	p=18	1.52
	J3K7KQ-5877	(2a+1)/8a	a=0.1229	1.2670
	JDRAD3-5877	(1+2p)/8p	p=18	1.2671

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D3S1358	JK6HE6-5877	(1+2p)/8p	p=18	1.2671
	LRXAZ4-5872	(1+2p)/8p	p=18	1.2671
	LU6RYY-5872	(1+2s)/8s	s=18	1.2670
	LUEBFM-5877	(1+4p)/8p	p=18	1.517
	MDDEXC-5872	(1+2p)/8p	p=18	1.267
	MFPURD-5872	(1+2p)/8p	p=18	1.267
	MK4AUM-5872	(2a+1)/8a	a=1229	1.2670
	MXJMCB-5877	(1+2p):8p	p = 18	1.267
	N9W7AC-5872	(1+2p)/(8p)	p=18	1.2671
	NHLXV6-5872	1+2p/8p	p=18	1.267087063
	NQE6GV-5872	(1+2p)/8p	p=18	1.2671
	RERAQ7-5872	5	a=18	1.267
	TAWX69-5872	(2p+1)/8p	p =18	1.2671
	VFV2AX-5877	(1+2s)/8s	s = 18	1.2671
	VLM9UR-5877	(1+2p)/8p	p=18	1.2671
	VVB37N-5872	(1+2q)/(8q)	q=18	1.2671
	XMTF94-5877			1.218
	XR3TRN-5872	1+2P	18	1.2458
	XYGF2R-5877	(1+2p)/8p	p=18	1.2671
	XZTEV2-5872	(1+2p)/8p	p=18	1.267
	Z47XTZ-5872	(1+2p)/8p	p = 18	1.2671
	ZGEE2Q-5872	(1+2p)/8p	p = 18	0.019138603
	ZPKJP2-5877			1.218
	ZZ6PNQ-5877	(1+4p)/8p	p=18	1.517087063

Statistical Analysis Summary of D3S1358 **Likelihood Ratio Mode: 1.2671**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D5S818	28YEKK-5872	(1+p)/4p	p=12	0.9875
	2QXD62-5872	(1+p)/4p	p=12	0.9874
	2WZGXK-5877	R=b(k1)+b(k1)+2ab(ko)U=2a bSI=R/U	a=12 b=7	0.987
	3B2FKH-5872	(1+p)/4p	p = 12	0.9875
	4LRTVY-5872	(p+1)/4p	p=12	0.9874
	64TV9W-5877			0.9681
	68T76W-5877			0.9681
	693BHK-5872	(1+a)/4a	a = 12	0.9875
	6VDCQH-5872	(1+a)/4a	A=12	0.9875
	73CYGW-5872	(1+q)/4q	q=12	0.9875
	77QVNJ-5872	(p+1)/4p	p = 12	0.9875
	7BLMUV-5872	(p+1)/4p	p=12	0.9875
	93MK6P-5872	(1+p)/(4p)	p = 12	0.98746
	9N7PPT-5872	(1+p)/4p	p=12	0.98746
	AG28UD-5877	(1+p)/4p	p = 12	0.9875
	AU6Q6D-5877	(1+a)/4a	a=12	0.9874
	CMHKJQ-5877	*	*	0.9681
	DH6229-5877	(1+p)/4p	p=12	0.98746
	EF96PK-5872	(1+p)/4p	p=12	0.98746
	EWGWRP-5872	(1+p)/(4p)	p=12	0.9875
	F8TL97-5872	(1+u)/4u	u=12	0.9874
	FPCFWA-5872	1+p/4p	p=12	0.987
	FYHKM6-5872	(1+u)/4u	u=12	0.9874
	GM2WBJ-5872	(1+p)/4p	p=12	0.9875
	GNCYWH-5872	(1+p)/4p	p=12	0.9875
	GREW8B-5872			0.9875
	HJFUJ4-5872	(1+2p)/4p	p=12	1.24
	J3K7KQ-5877	(a+1)/4a	a=0.3390	.9874
	JDRAD3-5877	(1+p)/4p	p=12	0.98746

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D5S818	JK6HE6-5877	(1+p)/4p	p=12	0.9875
	LRXAZ4-5872	(1+p)/4p	p=12	0.9875
	LU6RYY-5872	(1+u)/4u	u=12	0.9874
	LUEBFM-5877	(1+2p)/4p	p=12	1.237
	MDDEXC-5872	(1+p)/4p	p=12	0.9875
	MFPURD-5872	(1+p)/4p	p=12	0.9875
	MK4AUM-5872	(a+1)/4a	a=0.3390	0.9874
	MXJMCB-5877	(1+p):4p	p = 12	0.9875
	N9W7AC-5872	(1+p)/(4p)	p=12	0.98746
	NHLXV6-5872	1+p/4p	p=12	0.987463126
	NQE6GV-5872	(1+p)/4p	p=12	0.9875
	RERAQ7-5872	2	a=12	0.9875
	TAWX69-5872	(1+p)/4p	p = 12	0.9875
	VFV2AX-5877	(1+u)/4u	u = 12	0.9875
	VLM9UR-5877	(1+p)/4p	p=12	0.9875
	VVB37N-5872	(1+p)/(4p)	p=12	0.9875
	XMTF94-5877			0.9681
	XR3TRN-5872	1+P	12	1.339
	XYGF2R-5877	(1+p)/4p	p=12	0.9875
	XZTEV2-5872	(1+p)/4p	p=12	0.9875
	Z47XTZ-5872	(1+p)/4p	p = 12	0.98746
	ZGEE2Q-5872	(1+p)/4p	p = 12	0.07110525
	ZPKJP2-5877			0.9681
	ZZ6PNQ-5877	(1+4p)/8p	p=12	0.868731563

Statistical Analysis Summary of D5S818 **Likelihood Ratio Mode: 0.9875**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D7S820	28YEKK-5872	(1+2p)/8p	p=8	1.2848
	2QXD62-5872	(1+2p)/8p	p=8	1.2847
	2WZGXK-5877	R=c(k1)+2ac(ko)U=2acSI=R/U	a=8 c=9	1.285
	3B2FKH-5872	(1+2p)/8p	p = 8	1.2848
	4LRTVY-5872	(2p+1)/8p	p=8	1.284
	64TV9W-5877			1.234
	68T76W-5877			1.234
	693BHK-5872	(1+2a)/8a	a = 8	1.285
	6VDCQH-5872	(1+2a)/8a	A=8	1.2848
	73CYGW-5872	(1+2p)/8p	p=8	1.285
	77QVNJ-5872	(2p+1)/8p	p = 8	1.2848
	7BLMUV-5872	(2p+1)/8p	p=8	1.285
	93MK6P-5872	(1+2p)/(8p)	p = 8	1.2848
	9N7PPT-5872	(1+2p)/8p	p=8	1.2848
	AG28UD-5877	(1+2p)/8p	p = 8	1.2848
	AU6Q6D-5877	(1+2a)/8a	a=8	1.2847
	CMHKJQ-5877	*	*	1.234
	DH6229-5877	(1+2p)/8p	p=8	1.2848
	EF96PK-5872	(1+2p)/8p	p=8	1.2848
	EWGWRP-5872	(1+2p)/(8p)	p=8	1.2848
	F8TL97-5872	(1+2p)/8p	p=8	1.2847
	FPCFWA-5872	1+2p/8p	p=8	1.285
	FYHKM6-5872	(1+2p)/8p	p=8	1.2847
	GM2WBJ-5872	(1+2p)/8p	p=8	1.285
	GNCYWH-5872	(1+2p)/8p	p=8	1.285
	GREW8B-5872			1.2851
	HJFUJ4-5872	(1+4p)/8p	p=8	1.53
	J3K7KQ-5877	(2a+1)/8a	a=0.1208	1.2847
	JDRAD3-5877	(1+2p)/8p	p=8	1.2848

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D7S820	JK6HE6-5877	(1+2p)/8p	p=8	1.2848
	LRXAZ4-5872	(1+2p)/8p	p=8	1.2848
	LU6RYY-5872	(1+2p)/8p	p=8	1.2847
	LUEBFM-5877	(1+4p)/8p	p=8	1.535
	MDDEXC-5872	(1+2p)/8p	p=8	1.285
	MFPURD-5872	(1+2p)/8p	p=8	1.285
	MK4AUM-5872	(2a+1)/8a	a=0.1208	1.2847
	MXJMCB-5877	(1+2p):8p	p = 8	1.285
	N9W7AC-5872	(1+2p)/(8p)	p=8	1.2848
	NHLXV6-5872	1+2p/8p	p=8	1.284768212
	NQE6GV-5872	(1+2p)/8p	p=8	1.2848
	RERAQ7-5872	5	a=8	1.285
	TAWX69-5872	(2p+1)/8p	p = 8	1.2848
	VFV2AX-5877	(1+2p)/8p	p = 8	1.2848
	VLM9UR-5877	(1+2p)/8p	p=8	1.2848
	VVB37N-5872	(1+2p)/(8p)	p=8	1.2848
	XMTF94-5877			1.234
	XR3TRN-5872	1+2P	8	1.2416
	XYGF2R-5877	(1+2p)/8p	p=8	1.2848
	XZTEV2-5872	(1+2p)/8p	p=8	1.285
	Z47XTZ-5872	(1+2p)/8p	p = 8	1.2848
	ZGEE2Q-5872	(1+2p)/8p	p = 8	1.284768212
	ZPKJP2-5877			1.234
	ZZ6PNQ-5877	(1+4p)/8p	p=8	1.534768212

Statistical Analysis Summary of D7S820 **Likelihood Ratio Mode: 1.2848**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D8S1179	28YEKK-5872	(1+2p+pp)/4pp	p=13	5.4265
	2QXD62-5872	(1+2p+pp)/4pp	p=13	5.4265
	2WZGXK-5877	R=1(k2)+a(k1)+a(k1)+a2(ko) U=a2SI=R/U	a=13	5.426
	3B2FKH-5872	(1+2p+pp)/4pp	p = 13	5.4265
	4LRTVY-5872	$(p+1)^2/4p^2$	p=13	5.426
	64TV9W-5877			4.905
	68T76W-5877			4.905
	693BHK-5872	(1+2a+2a^2)/4a^2	a = 13	5.427
	6VDCQH-5872	[(1+a)^2]/(2a)^2	A=13	5.4265
	73CYGW-5872	(1+p)(1+p)/4(p)(p)	p=13	5.427
	77QVNJ-5872	((p)^2+2p+1)/(2p)^2	p = 13	5.4265
	7BLMUV-5872	(p+1)^2/4p^2	p=13	5.427
	93MK6P-5872	((1+p)^2)/((2p)^2)	p = 13	5.4265
	9N7PPT-5872	(1+p)^2/(2p)^2	p=13	5.4265
	AG28UD-5877	(1+2p+pp)/4pp	p = 13	5.4265
	AU6Q6D-5877	(1+a)^2/(2a)^2	a=13	5.4265
	CMHKJQ-5877	*	*	4.905
	DH6229-5877	(1+2p+p2)/4p2	p=13	5.4265
	EF96PK-5872	(1+p)^2/(2p)^2	p=13	5.4265
	EWGWRP-5872	((1+p)^2)/(4p^2)	p=13	5.4265
	F8TL97-5872	(1+2p+pp)/4pp	p=13	5.4265
	FPCFWA-5872	(1+p)^2/4p^2	p=13	5.427
	FYHKM6-5872	(1+2p+pp)/4pp	p=13	5.4265
	GM2WBJ-5872	(1+p)^2/4p^2	p=13	5.427
	GNCYWH-5872	[(1+p)^2]/4p^2	p=13	5.427
	GREW8B-5872			5.4264
	HJFUJ4-5872	(1+p)/2p	p=13	2.33
	J3K7KQ-5877	((a+1)^2)/(4a^2)	a=0.2733	5.4265
	JDRAD3-5877	(1+2p+p2)/4p2	p=13	5.4265

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D8S1179	JK6HE6-5877	(1+2p+pp)/4pp	p=13	5.427
	LRXAZ4-5872	(1+p)2/(2p)2	p=13	5.4265
	LU6RYY-5872	(1+2p+pp)/4pp	p=13	5.4265
	LUEBFM-5877	2p(1+p)/(2P)^2	p=13	2.33
	MDDEXC-5872	(1+p)2/4p2	p=13	5.427
	MFPURD-5872	(1+p)^2/4p^2	p=13	5.427
	MK4AUM-5872	((a+1)^2)/(4a^2)	a=0.2733	5.4265
	MXJMCB-5877	(1+p)^2:(2p)^2	p = 13	5.427
	N9W7AC-5872	[(1+p)^2]/[(2p)^2]	p=13	5.4265
	NHLXV6-5872	(1+p)2/(2p)2	p=13	5.426530189
	NQE6GV-5872	(1+2p+pp)/4pp	p=13	5.4265
	RERAQ7-5872	1	a=13	5.427
	TAWX69-5872	(p+1)^2/4p^2	p = 13	5.4265
	VFV2AX-5877	(1+2p+pp)/4pp	p = 13	5.4265
	VLM9UR-5877	[(1+p)/2p]^2	p=13	5.4265
	VVB37N-5872	(1+2p+pp)/(4pp)	p=13	5.4265
	XMTF94-5877			4.905
	XR3TRN-5872	(1+P)^2	13	1.62129289
	XYGF2R-5877	(1+2p+pp)/4pp	p=13	5.4265
	XZTEV2-5872	(1+p)^2/4p^2	p=13	5.427
	Z47XTZ-5872	(1+p)^2/(2p)^2	p = 13	5.4265
	ZGEE2Q-5872	(1+p)^2/4(p^2)	p = 13	0.030274763
	ZPKJP2-5877			4.905
	ZZ6PNQ-5877	(p+q+4pq)/8pq	p=q=13	1.414745701

Statistical Analysis Summary of D8S1179 **Likelihood Ratio Mode: 5.4265**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D10S1248	28YEKK-5872	(1+p)/4p	p=13	1.1647
	2QXD62-5872	(1+p)/4p	p=13	1.1647
	2WZGXK-5877	R=a(k1)+a2(ko)U=a2SI=R/U	a=13	1.164
	3B2FKH-5872	(1+p)/4p	p = 13	1.1647
	4LRTVY-5872	(p+1)/4p	p=13	1.164
	64TV9W-5877			1.129
	68T76W-5877			1.129
	693BHK-5872	(1+a)/4a	a = 13	1.165
	6VDCQH-5872	(1+a)/4a	A=13	1.1647
	73CYGW-5872	(1+p)/4p	p=13	1.165
	77QVNJ-5872	(p+1)/4p	p = 13	1.1647
	7BLMUV-5872	(p+1)/4p	p=13	1.165
	93MK6P-5872	(1+p)/(4p)	p = 13	1.1647
	9N7PPT-5872	(1+p)/4p	p=13	1.1647
	AG28UD-5877	(1+p)/4p	p = 13	1.1647
	AU6Q6D-5877	(1+a)/4a	a=13	1.1647
	CMHKJQ-5877	*	*	1.129
	DH6229-5877	(1+p)/4p	p=13	1.1647
	EF96PK-5872	(1+p)/4p	p=13	1.1647
	EWGWRP-5872	(1+p)/(4p)	p=13	1.1647
	F8TL97-5872	(1+p)/4p	p=13	1.1647
	FPCFWA-5872	1+p/4p	p=13	1.165
	FYHKM6-5872	(1+p)/4p	p=13	1.1647
	GM2WBJ-5872	(1+p)/4p	p=13	1.165
	GNCYWH-5872	(1+p)/4p	p=13	1.165
	GREW8B-5872			1.1647
	HJFUJ4-5872	(1+2p)/4p	p=13	1.42
	J3K7KQ-5877	(a+1)/4a	a=0.2733	1.1647
	JDRAD3-5877	(1+p)/4p	p=13	1.1647
	JK6HE6-5877	(1+p)/4p	p=13	1.1647

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D10S1248	LRXAZ4-5872	(1+p)/4p	p=13	1.1648
	LU6RYY-5872	(1+p)/4p	p=13	1.1647
	LUEBFM-5877	(1+2p)/4p	p=13	1.415
	MDDEXC-5872	(1+p)/4p	p=13	1.165
	MFPURD-5872	(1+p)/4p	p=13	1.165
	MK4AUM-5872	(a+1)/4a	a=0.2733	1.1647
	MXJMCB-5877	(1+p):4p	p = 13	1.165
	N9W7AC-5872	(1+p)/(4p)	p=13	1.1647
	NHLXV6-5872	1+p/4p	p=13	1.164745701
	NQE6GV-5872	(1+p)/4p	p=13	1.1647
	RERAQ7-5872	3	a=13	1.165
	TAWX69-5872	(1+p)/4p	p = 13	1.1647
	VFV2AX-5877	(1+p)/4p	p = 13	1.1647
	VLM9UR-5877	(1+p)/4p	p=13	1.1647
	VVB37N-5872	(1+p)/(4p)	p=13	1.1647
	XMTF94-5877			1.129
	XR3TRN-5872	1+P	13	1.2733
	XYGF2R-5877	(1+p)/4p	p=13	1.1647
	XZTEV2-5872	(1+p)/4p	p=13	1.165
	Z47XTZ-5872	(1+p)/4p	p = 13	1.1647
	ZGEE2Q-5872	(1+p)/4p	p = 13	0.052835723
	ZPKJP2-5877			1.129
	ZZ6PNQ-5877	(1+4p)/8p	p=13	0.95737285
Statistical Analysis Summary of D10S1248			**Likelihood Ratio Mode:**	**1.1647**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D12S391	28YEKK-5872	(1+2p)/8p	p=19	0.9128
	2QXD62-5872	(1+2p)/8p	p=19	0.9127
	2WZGXK-5877	R=c(k1)+2ac(ko)U=2acSI=R/U	a=19 c=18	0.993
	4LRTVY-5872	(2p+1)/8p	p=19	0.9127
	64TV9W-5877			0.8992
	68T76W-5877			0.8992
	693BHK-5872	(1+2a)/8a	a = 19	0.9128
	6VDCQH-5872	(1+2a)/8a	A=19	0.9128
	73CYGW-5872	(1+2q)/8q	q=19	0.9128
	77QVNJ-5872	(2p+1)/8p	p = 19	0.9128
	7BLMUV-5872	(2p+1)/8p	p=19	0.9128
	93MK6P-5872	(1+2p)/(8p)	p = 19	0.91278
	9N7PPT-5872	(1+2p)/8p	p=19	0.91278
	AG28UD-5877	(1+2q)/8q	q = 19	0.9128
	AU6Q6D-5877	(1+2a)/8a	a=19	0.9127
	DH6229-5877	(1+2p)/8p	p=19	0.91278
	EF96PK-5872	(1+2p)/8p	p=19	0.91278
	F8TL97-5872	(1+2r)/8r	r=19	0.9127
	FPCFWA-5872	1+2p/8p	p=19	0.913
	FYHKM6-5872	(1+2r)/8r	r=19	0.9127
	GM2WBJ-5872	(1+2p)/8p	p=19	0.9128
	GNCYWH-5872	(1+2p)/8p	p=19	0.9128
	GREW8B-5872			0.9129
	HJFUJ4-5872	(1+4p)/8p	p=19	1.16
	J3K7KQ-5877	(2a+1)/8a	a=0.1886	.9127
	JDRAD3-5877	(1+2p)/8p	p=19	0.91278
	JK6HE6-5877	(1+2p)/8p	p=19	0.9128
	LRXAZ4-5872	(1+2p)/8p	p=19	0.9128
	LU6RYY-5872	(1+2r)/8r	r=19	0.9127

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D12S391	LUEBFM-5877	(1+4p)/8p	p=19	1.163
	MDDEXC-5872	(1+2p)/8p	p=19	0.9128
	MFPURD-5872	(1+2p)/8p	p=19	0.9128
	MK4AUM-5872	(2a+1)/8a	a=0.1886	0.9127
	MXJMCB-5877	(1+2p):8p	p = 19	0.9128
	N9W7AC-5872	(1+2p)/(8p)	p=19	0.91278
	NHLXV6-5872	1+2p/8p	p=19	0.912778366
	RERAQ7-5872	5	a=19	0.9128
	TAWX69-5872	(2p+1)/8p	p = 19	0.9128
	VFV2AX-5877	(1+2r)/8r	r = 19	0.9128
	VLM9UR-5877	(1+2p)/8p	p=19	0.9128
	VVB37N-5872	(1+2q)/(8q)	q=19	0.9128
	XMTF94-5877			0.8992
	XR3TRN-5872	1+2P	19	1.3772
	XYGF2R-5877	(1+2p)/8p	p=19	0.9128
	XZTEV2-5872	(1+2p)/8p	p=19	0.9128
	Z47XTZ-5872	(1+2p)/8p	p = 19	0.91278
	ZGEE2Q-5872	(1+2p)/8p	p = 19	0.03246749
	ZPKJP2-5877			0.8992
	ZZ6PNQ-5877	(1+4p)/8p	p=19	1.162778367

Statistical Analysis Summary of D12S391 **Likelihood Ratio Mode: 0.9128**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D13S317	28YEKK-5872	(1+2p)/8p	p=12	0.7815
	2QXD62-5872	(1+2p)/8p	p=12	0.7814
	2WZGXK-5877	R=c(k1)+2ac(ko)U=2acSI=R/U	a=12 c=9	0.782
	3B2FKH-5872	(1+2p)/8p	p = 12	0.7815
	4LRTVY-5872	(2p+1)/8p	p=12	0.7814
	64TV9W-5877			0.7756
	68T76W-5877			0.7756
	693BHK-5872	(1+2a)/8a	a = 12	0.7815
	6VDCQH-5872	(1+2a)/8a	A=12	0.7815
	73CYGW-5872	(1+2q)/8q	q=12	0.7815
	77QVNJ-5872	(2p+1)/8p	p = 12	0.7815
	7BLMUV-5872	(2p+1)/8p	p=12	0.7815
	93MK6P-5872	(1+2p)/(8p)	p = 12	0.78146
	9N7PPT-5872	(1+2p)/8p	p=12	0.78146
	AG28UD-5877	(1+2p)/8p	p = 12	0.7815
	AU6Q6D-5877	(1+2a)/8a	a=12	0.7814
	CMHKJQ-5877	*	*	0.7756
	DH6229-5877	(1+2p)/8p	p=12	0.78146
	EF96PK-5872	(1+2p)/8p	p=12	0.78146
	EWGWRP-5872	(1+2p)/(8p)	p=12	0.7815
	F8TL97-5872	(1+2s)/8s	s=12	0.7814
	FPCFWA-5872	1+2p/8p	p=12	0.781
	FYHKM6-5872	(1+2s)/8s	s=12	0.7814
	GM2WBJ-5872	(1+2p)/8p	p=12	0.7815
	GNCYWH-5872	(1+2p)/8p	p=12	0.7815
	GREW8B-5872			0.7815
	HJFUJ4-5872	(1+4p)/8p	p=12	1.03
	J3K7KQ-5877	(2a+1)/8a	a=0.2352	.7814
	JDRAD3-5877	(1+2p)/8p	p=12	0.78146

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D13S317	JK6HE6-5877	(1+2p)/8p	p=12	0.7815
	LRXAZ4-5872	(1+2p)/8p	p=12	0.7815
	LU6RYY-5872	(1+2s)/8s	s=12	0.7814
	LUEBFM-5877	(1+4p)/8p	p=12	1.031
	MDDEXC-5872	(1+2p)/8p	p=12	0.7815
	MFPURD-5872	(1+2p)/8p	p=12	0.7815
	MK4AUM-5872	(2a+1)/8a	a=0.2352	0.7814
	MXJMCB-5877	(1+2p):8p	p = 12	0.7815
	N9W7AC-5872	(1+2p)/(8p)	p=12	0.78146
	NHLXV6-5872	1+2p/8p	p=12	0.781462585
	NQE6GV-5872	(1+2p)/8p	p=12	0.7815
	RERAQ7-5872	5	a=12	0.7815
	TAWX69-5872	(2p+1)/8p	p = 12	0.7815
	VFV2AX-5877	(1+2s)/8s	s = 12	0.7815
	VLM9UR-5877	(1+2p)/8p	p=12	0.7815
	VVB37N-5872	(1+2p)/(8p)	p=12	0.7815
	XMTF94-5877			0.7756
	XR3TRN-5872	1+2P	12	1.4704
	XYGF2R-5877	(1+2p)/8p	p=12	0.7815
	XZTEV2-5872	(1+2p)/8p	p=12	0.7815
	Z47XTZ-5872	(1+2p)/8p	p = 12	0.78146
	ZGEE2Q-5872	(1+2p)/8p	p = 12	0.781462585
	ZPKJP2-5877			0.7756
	ZZ6PNQ-5877	(1+4p)/8p	p=12	1.031462585

Statistical Analysis Summary of D13S317 **Likelihood Ratio Mode: 0.7815**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D16S539	28YEKK-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	2QXD62-5872	(1+p+q+2pq)/8pq	p=11, q=12	2.8736
	2WZGXK-5877	R=1(K2)+a(k1)+b(k1)+2ab(ko)U=2abSI=R/U	a=11 b=12	2.874
	3B2FKH-5872	(1+p+q+2pq)/8pq	p = 11 q = 12	2.8736
	4LRTVY-5872	(p+q+2pq+1)/8pq	p=11 q=12	2.873
	64TV9W-5877			2.832
	68T76W-5877			2.832
	693BHK-5872	(1+a+b+2ab)/8ab	a = 11 b = 12	2.874
	6VDCQH-5872	(1+a+b+2ab)/8ab	A=11 B=12	2.8736
	73CYGW-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.874
	77QVNJ-5872	(2pq+p+q+1)/8pq	p = 11 q = 12	2.8736
	7BLMUV-5872	(p+q+2pq+1)/8pq	p=11 q=12	2.874
	93MK6P-5872	(1+p+q+2pq)/(8pq)	p = 11/ q = 12	2.8736
	9N7PPT-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	AG28UD-5877	(1+p+q+2pq)/8pq	p = 11 q = 12	2.8736
	AU6Q6D-5877	(1+a+b+2ab)/8ab	a=11 b=12	2.8736
	CMHKJQ-5877	*	*	2.832
	DH6229-5877	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	EF96PK-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	EWGWRP-5872	(1+p+q+2pq)/(8pq)	p=11 q=12	2.8736
	F8TL97-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	FPCFWA-5872	1+p+q+2pq/8pq	p=11 q=12	2.874
	FYHKM6-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	GM2WBJ-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.874
	GNCYWH-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.874
	GREW8B-5872			2.8730
	HJFUJ4-5872	(p+q+4pq)/8pq	p=11 q=12	1.42
	J3K7KQ-5877	(a+b+2ab+1)/(8ab)	a=0.2648 b=0.2775	2.8736
	JDRAD3-5877	(1+p+q+2pq)/8pq	p=11 q=12	2.8736

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D16S539	JK6HE6-5877	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	LRXAZ4-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	LU6RYY-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	LUEBFM-5877	(p+q+4pq)/8pq	p = 11 q = 12	1.422
	MDDEXC-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.874
	MFPURD-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.874
	MK4AUM-5872	(a+b+2ab+1)/(8ab)	a=0.2648 b=0.2775	2.8736
	MXJMCB-5877	(1+p+q+2pq):8pq	p = 11 q = 12	2.874
	N9W7AC-5872	(1+p+q+2pq)/(8pq)	p=11 q=12	2.8736
	NHLXV6-5872	1+p+q+2pq/8pq	p=11 q=12	2.873601698
	NQE6GV-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	RERAQ7-5872	4	a=11 b=12	2.874
	TAWX69-5872	(1+p+q+2pq)/8pq	p = 11 q = 12	2.8736
	VFV2AX-5877	(1+p+q+2pq)/8pq	p = 11 q = 12	2.8736
	VLM9UR-5877	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	VVB37N-5872	(1+p+q+2pq)/(8pq)	p=11 q=12	2.8736
	XMTF94-5877			2.832
	XR3TRN-5872	1+P+Q+2PQ	P=11 Q=12	1.689264
	XYGF2R-5877	(1+p+q+2pq)/8pq	p=11 q=12	2.8736
	XZTEV2-5872	(1+p+q+2pq)/8pq	p=11 q=12	2.874
	Z47XTZ-5872	(1+p+q+2pq)/8pq	p = 11 q = 12	2.8736
	ZGEE2Q-5872	(1+p+q+2pq)/8pq	p = 11 q = 12	2.873601698
	ZPKJP2-5877			2.832
	ZZ6PNQ-5877	(p+q+4pq)/8pq	p=11 q=12	1.422504831

Statistical Analysis Summary of D16S539 **Likelihood Ratio Mode: 2.8736**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D18S51	28YEKK-5872	(1+2p)/8p	p=14	1.0264
	2QXD62-5872	(1+2p)/8p	p=14	1.0263
	2WZGXK-5877	R=c(k1)+2ac(ko)U=2acSI=R/U	a=14 c=20	1.026
	3B2FKH-5872	(1+2p)/8p	p = 14	1.0264
	4LRTVY-5872	(2p+1)/8p	p=14	1.026
	64TV9W-5877			1.004
	68T76W-5877			1.004
	693BHK-5872	(1+2a)/8a	a = 14	1.026
	6VDCQH-5872	(1+2a)/8a	A=14	1.0264
	73CYGW-5872	(1+2p)/8p	p=14	1.026
	77QVNJ-5872	(2p+1)/8p	p = 14	1.0264
	7BLMUV-5872	(2p+1)/8p	p=14	1.026
	93MK6P-5872	(1+2p)/(8p)	p = 14	1.0264
	9N7PPT-5872	(1+2p)/8p	p=14	1.0264
	AG28UD-5877	(1+2p)/8p	p = 14	1.0264
	AU6Q6D-5877	(1+2a)/8a	a=14	1.0263
	CMHKJQ-5877	*	*	1.004
	DH6229-5877	(1+2p)/8p	p=14	1.0264
	EF96PK-5872	(1+2p)/8p	p=14	1.0264
	EWGWRP-5872	(1+2p)/(8p)	p=14	1.0264
	F8TL97-5872	(1+2p)/8p	p=14	1.0263
	FPCFWA-5872	1+2p/8p	p=14	1.026
	FYHKM6-5872	(1+2p)/8p	p=14	1.0263
	GM2WBJ-5872	(1+2p)/8p	p=14	1.026
	GNCYWH-5872	(1+2p)/8p	p=14	1.026
	GREW8B-5872			1.0263
	HJFUJ4-5872	(1+4p)/8p	p=14	1.28
	J3K7KQ-5877	(2a+1)/8a	a=0.1610	1.0263
	JDRAD3-5877	(1+2p)/8p	p=14	1.0264

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D18S51	JK6HE6-5877	(1+2p)/8p	p=14	1.0264
	LRXAZ4-5872	(1+2p)/8p	p=14	1.0264
	LU6RYY-5872	(1+2p)/8p	p=14	1.0263
	LUEBFM-5877	(1+4p)/8p	p=14	1.276
	MDDEXC-5872	(1+2p)/8p	p=14	1.026
	MFPURD-5872	(1+2p)/8p	p=14	1.026
	MK4AUM-5872	(2a+1)/8a	a=0.1600	1.0263
	MXJMCB-5877	(1+2p):8p	p = 14	1.026
	N9W7AC-5872	(1+2p)/(8p)	p=14	1.0264
	NHLXV6-5872	1+2p/8p	p=14	1.026397516
	NQE6GV-5872	(1+2p)/8p	p=14	1.0264
	RERAQ7-5872	5	a=14	1.026
	TAWX69-5872	(2p+1)/8p	p = 14	1.0264
	VFV2AX-5877	(1+2p)/8p	p = 14	1.0264
	VLM9UR-5877	(1+2p)/8p	p=14	1.0264
	VVB37N-5872	(1+2p)/(8p)	p=14	1.0264
	XMTF94-5877			1.004
	XR3TRN-5872	1+2P	14	1.322
	XYGF2R-5877	(1+2p)/8p	p=14	1.0264
	XZTEV2-5872	(1+2p)/8p	p=14	1.026
	Z47XTZ-5872	(1+2p)/8p	p = 14	1.0264
	ZGEE2Q-5872	(1+2p)/8p	p = 14	1.026397516
	ZPKJP2-5877			1.004
	ZZ6PNQ-5877	(1+4p)/8p	p=14	1.276397516

Statistical Analysis Summary of D18S51 **Likelihood Ratio Mode: 1.0264**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D19S433	28YEKK-5872	(1+p)/4p	p=14	0.9566
	2QXD62-5872	(1+p)/4p	p=14	0.9566
	2WZGXK-5877	R=b(k1)+b(k1)+2ab(ko)U=2a bSI=R/U	a=14 b=15	0.956
	3B2FKH-5872	(1+p)/4p	p = 14	0.9566
	4LRTVY-5872	(p+1)/4p	p=14	0.9566
	64TV9W-5877			0.9398
	68T76W-5877			0.9398
	693BHK-5872	(1+a)/4a	a = 14	0.9566
	6VDCQH-5872	(1+a)/4a	A=14	0.9566
	73CYGW-5872	(1+p)/4p	p=14	0.9566
	77QVNJ-5872	(p+1)/4p	p = 14	0.9566
	7BLMUV-5872	(p+1)/4p	p=14	0.9566
	93MK6P-5872	(1+p)/(4p)	p = 14	0.95661
	9N7PPT-5872	(1+p)/4p	p=14	0.95661
	AG28UD-5877	(1+p)/4p	p = 14	0.9566
	AU6Q6D-5877	(1+a)/4a	a=14	0.9566
	CMHKJQ-5877	*	*	0.9398
	DH6229-5877	(1+p)/4p	p=14	0.95661
	EF96PK-5872	(1+p)/4p	p=14	0.95661
	EWGWRP-5872	(1+p)/(4p)	p=14	0.9566
	F8TL97-5872	(1+p)/4p	p=14	0.9566
	FPCFWA-5872	1+p/4p	p=14	0.957
	FYHKM6-5872	(1+p)/4p	p=14	0.9566
	GM2WBJ-5872	(1+p)/4p	p=14	0.9566
	GNCYWH-5872	(1+p)/4p	p=14	0.9566
	GREW8B-5872			0.9566
	HJFUJ4-5872	(1+2p)/4p	p=14	1.21
	J3K7KQ-5877	(a+1)/4a	a=0.3538	.9566
	JDRAD3-5877	(1+p)/4p	p=14	0.95661

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D19S433	JK6HE6-5877	(1+p)/4p	p=14	0.9566
	LRXAZ4-5872	(1+p)/4p	p=14	0.9566
	LU6RYY-5872	(1+p)/4p	p=14	0.9566
	LUEBFM-5877	(1+2p)/4p	p=14	1.207
	MDDEXC-5872	(1+p)/4p	p=14	0.9566
	MFPURD-5872	(1+p)/4p	p=14	0.9566
	MK4AUM-5872	(a+1)/4a	a=0.3538	0.9566
	MXJMCB-5877	(1+p):4p	p = 14	0.9566
	N9W7AC-5872	(1+p)/(4p)	p=14	0.95661
	NHLXV6-5872	1+p/4p	p=14	0.956613906
	NQE6GV-5872	(1+p)/4p	p=14	0.9566
	RERAQ7-5872	2	a=14	0.9566
	TAWX69-5872	(1+p)/4p	p = 14	0.9566
	VFV2AX-5877	(1+p)/4p	p = 14	0.9566
	VLM9UR-5877	(1+p)/4p	p=14	0.9566
	VVB37N-5872	(1+p)/(4p)	p=14	0.9566
	XMTF94-5877			0.9398
	XR3TRN-5872	1+P	14	1.3538
	XYGF2R-5877	(1+p)/4p	p=14	0.9566
	XZTEV2-5872	(1+p)/4p	p=14	0.9566
	Z47XTZ-5872	(1+p)/4p	p = 14	0.95661
	ZGEE2Q-5872	(1+p)/4p	p = 14	0.07551861
	ZPKJP2-5877			0.9398
	ZZ6PNQ-5877	(1+4p)/8p	p=14	0.853306953

Statistical Analysis Summary of D19S433 **Likelihood Ratio Mode: 0.9566**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D21S11	28YEKK-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.5545
	2QXD62-5872	(1+p+q+2pq)/8pq	p=28, q=30	6.5544
	2WZGXK-5877	R=1(K2)+a(k1)+b(k1)+2ab(ko)U=2abSI=R/U	a=28 b=30	6.555
	3B2FKH-5872	(1+p+q+2pq)/8pq	p = 28 q = 30	6.5545
	4LRTVY-5872	(p+q+2pq+1)/8pq	p=28 q=30	6.554
	64TV9W-5877			6.117
	68T76W-5877			6.117
	693BHK-5872	(1+a+b+2ab)/8ab	a = 28 b = 30	6.554
	6VDCQH-5872	(1+a+b+2ab)/8ab	A=28 B=30	6.5545
	73CYGW-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.554
	77QVNJ-5872	(2pq+p+q+1)/8pq	p = 28 q = 30	6.5545
	7BLMUV-5872	(p+q+2pq+1)/8pq	p=28 q=30	6.554
	93MK6P-5872	(1+p+q+2pq)/(8pq)	p = 28/ q = 30	6.5545
	9N7PPT-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.5545
	AG28UD-5877	(1+p+q+2pq)/8pq	p = 28 q = 30	6.5545
	AU6Q6D-5877	(1+a+b+2ab)/8ab	a=28 b=30	6.5544
	CMHKJQ-5877	*	*	6.117
	DH6229-5877	(1+p+q+2pq)/8pq	p=28 q=30	6.5545
	EF96PK-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.5545
	EWGWRP-5872	(1+p+q+2pq)/(8pq)	p=28 q=30	6.5545
	F8TL97-5872	(1+p+r+2pr)/8pr	p=28 r=30	6.5544
	FPCFWA-5872	1+p+q+2pq/8pq	p=28 q=30	6.554
	FYHKM6-5872	(1+p+r+2pr)/8pr	p=28 r=30	6.5544
	GM2WBJ-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.554
	GNCYWH-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.554
	GREW8B-5872			6.5558
	HJFUJ4-5872	(p+q+4pq)/8pq	p=28 q=30	2.21
	J3K7KQ-5877	(a+b+2ab+1)/(8ab)	a=0.0996 b=0.2733	6.5544
	JDRAD3-5877	(1+p+q+2pq)/8pq	p=28 q=30	6.5545

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D21S11	JK6HE6-5877	(1+p+q+2pq)/8pq	p=28 q=30	6.5545
	LRXAZ4-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.5545
	LU6RYY-5872	(1+p+r+2pr)/8pr	p=28 r=30	6.5544
	LUEBFM-5877	(p+q+4pq)/8pq	p = 28 q = 30	2.212
	MDDEXC-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.554
	MFPURD-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.554
	MK4AUM-5872	(a+b+2ab+1)/(8ab)	a=0996 b=0.2733	6.5544
	MXJMCB-5877	(1+p+q+2pq):8pq	p = 28 q = 30	6.554
	N9W7AC-5872	(1+p+q+2pq)/(8pq)	p=28 q=30	6.5545
	NHLXV6-5872	1+p+q+2pq/8pq	p=28 q=30	6.554489822
	NQE6GV-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.5545
	RERAQ7-5872	4	a=28 b=30	6.555
	TAWX69-5872	(1+p+q+2pq)/8pq	p = 28 q = 30	6.5545
	VFV2AX-5877	(1+p+r+2pr)/8pr	p = 28 r = 30	6.5545
	VLM9UR-5877	(1+p+q+2pq)/8pq	p=28 q=30	6.5545
	VVB37N-5872	(1+p+q+2pq)/(8pq)	p=28 q=30	6.5545
	XMTF94-5877			6.117
	XR3TRN-5872	1+P+Q+2PQ	P=28 Q=30	1.42734136
	XYGF2R-5877	(1+p+q+2pq)/8pq	p=28 q=30	6.5545
	XZTEV2-5872	(1+p+q+2pq)/8pq	p=28 q=30	6.554
	Z47XTZ-5872	(1+p+q+2pq)/8pq	p = 28 q = 30	6.5545
	ZGEE2Q-5872	(1+p+q+2pq)/8pq	p = 28 q = 30	6.554489822
	ZPKJP2-5877			6.117
	ZZ6PNQ-5877	(p+q+4pq)/8pq	p=28 q=30	2.212392931

Statistical Analysis Summary of D21S11 **Likelihood Ratio Mode: 6.5545**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D22S1045	28YEKK-5872	(1+2p+pp)/4pp	p=15	2.8031
	2QXD62-5872	(1+2p+pp)/4pp	p=15	2.8031
	2WZGXK-5877	R=1(k2)+a(k1)+a(k1)+a2(ko) U=a2SI=R/U	a=15	2.803
	3B2FKH-5872	(1+2p+pp)/4pp	p = 15	2.8031
	4LRTVY-5872	$(p+1)^2/4p^2$	p=15	2.803
	64TV9W-5877			2.676
	68T76W-5877			2.676
	693BHK-5872	(1+2a+2a^2)/4a^2	a = 15	2.803
	6VDCQH-5872	[(1+a)^2]/(2a)^2	A=15	2.8031
	73CYGW-5872	(1+p)(1+p)/4(p)(p)	p=15	2.803
	77QVNJ-5872	((p)^2+2p+1)/(2p)^2	p = 15	2.8031
	7BLMUV-5872	(p+1)^2/4p^2	p=15	2.803
	93MK6P-5872	((1+p)^2)/((2p)^2)	p = 15	2.8031
	9N7PPT-5872	(1+p)^2/(2p)^2	p=15	2.8031
	AG28UD-5877	(1+2p+pp)/4pp	p = 15	2.8031
	AU6Q6D-5877	(1+a)^2/(2a)^2	a=15	2.8031
	CMHKJQ-5877	*	*	2.676
	DH6229-5877	(1+2p+p2)/4p2	p=15	2.8031
	EF96PK-5872	(1+p)^2/(2p)^2	p=15	2.8031
	EWGWRP-5872	((1+p)^2)/(4p^2)	p=15	2.8031
	F8TL97-5872	(1+2p+pp)/4pp	p=15	2.8031
	FPCFWA-5872	(1+p)^2/4p^2	p=15	2.803
	FYHKM6-5872	(1+2p+pp)/4pp	p=15	2.8031
	GM2WBJ-5872	(1+p)^2/4p^2	p=15	2.803
	GNCYWH-5872	[(1+p)^2]/4p^2	p=15	2.803
	GREW8B-5872			2.8027
	HJFUJ4-5872	(1+p)/2p	p=15	1.67
	J3K7KQ-5877	((a+1)^2)/(4a^2)	a=0.4258	2.8031
	JDRAD3-5877	(1+2p+p2)/4p2	p=15	2.8031

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D22S1045	JK6HE6-5877	(1+2p+pp)/4pp	p=15	2.803
	LRXAZ4-5872	(1+p)2/(2p)2	p=15	2.8032
	LU6RYY-5872	(1+2p+pp)/4pp	p=15	2.8031
	LUEBFM-5877	2p(1+p)/(2P)^2	p=15	1.674
	MDDEXC-5872	(1+p)2/4p2	p=15	2.803
	MFPURD-5872	(1+p)^2/4p^2	p=15	2.803
	MK4AUM-5872	((a+1)^2)/(4a^2)	a=0.4258	2.8031
	MXJMCB-5877	(1+p)^2:(2p)^2	p = 15	2.803
	N9W7AC-5872	[(1+p)^2]/[(2p)^2]	p=15	2.8031
	NHLXV6-5872	(1+p)2/(2p)2	p=15	2.803147271
	NQE6GV-5872	(1+2p+pp)/4pp	p=15	2.8031
	RERAQ7-5872	1	a=15	2.803
	TAWX69-5872	(p+1)^2/4p^2	p = 15	2.8031
	VFV2AX-5877	(1+2p+pp)/4pp	p = 15	2.8031
	VLM9UR-5877	[(1+p)/2p]^2	p=15	2.8031
	VVB37N-5872	(1+2p+pp)/(4pp)	p=15	2.8031
	XMTF94-5877			2.676
	XR3TRN-5872	(1+P)^2	15	2.03290564
	XYGF2R-5877	(1+2p+pp)/4pp	p=15	2.8031
	XZTEV2-5872	(1+p)^2/4p^2	p=15	2.803
	Z47XTZ-5872	(1+p)^2/(2p)^2	p = 15	2.8031
	ZGEE2Q-5872	(1+p)^2/4(p^2)	p = 15	0.092144315
	ZPKJP2-5877			2.676
	ZZ6PNQ-5877	(p+q+4pq)/8pq	p=q=15	1.087130108

Statistical Analysis Summary of D22S1045 **Likelihood Ratio Mode: 2.8031**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
CSF1PO	28YEKK-5872	(1+2p+pp)/4pp	p=10	6.7966
	2QXD62-5872	(1+2p+pp)/4pp	p=10	6.7966
	2WZGXK-5877	R=1(k2)+a(k1)+a(k1)+a2(ko) U=a2SI=R/U	a=10	6.796
	3B2FKH-5872	(1+2p+pp)/4pp	p = 10	6.7966
	4LRTVY-5872	$(p+1)^2/4p^2$	p=10	6.796
	64TV9W-5877			5.999
	68T76W-5877			5.999
	693BHK-5872	(1+2a+2a^2)/4a^2	a = 10	6.797
	6VDCQH-5872	[(1+a)^2]/(2a)^2	A=10	6.7966
	73CYGW-5872	(1+p)(1+p)/4(p)(p)	p=10	6.797
	77QVNJ-5872	((p)^2+2p+1)/(2p)^2	p = 10	6.7966
	7BLMUV-5872	(p+1)^2/4p^2	p=10	6.797
	93MK6P-5872	((1+p)^2)/((2p)^2)	p = 10	6.7966
	9N7PPT-5872	(1+p)^2/(2p)^2	p=10	6.7966
	AG28UD-5877	(1+2p+pp)/4pp	p = 10	6.7966
	AU6Q6D-5877	(1+a)^2/(2a)^2	a=10	6.7966
	CMHKJQ-5877	*	*	5.999
	DH6229-5877	(1+2p+p2)/4p2	p=10	6.7966
	EF96PK-5872	(1+p)^2/(2p)^2	p=10	6.7966
	EWGWRP-5872	((1+p)^2)/(4p^2)	p=10	6.7966
	F8TL97-5872	(1+2p+pp)/4pp	p=10	6.7966
	FPCFWA-5872	(1+p)^2/4p^2	p=10	6.797
	FYHKM6-5872	(1+2p+pp)/4pp	p=10	6.7966
	GM2WBJ-5872	(1+p)^2/4p^2	p=10	6.797
	GNCYWH-5872	[(1+p)^2]/4p^2	p=10	6.797
	GREW8B-5872			6.7972
	HJFUJ4-5872	(1+p)/2p	p=10	2.61
	J3K7KQ-5877	((a+1)^2)/(4a^2)	a=0.2373	6.7966
	JDRAD3-5877	(1+2p+p2)/4p2	p=10	6.7966

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
CSF1PO	JK6HE6-5877	(1+2p+pp)/4pp	p=10	6.797
	LRXAZ4-5872	(1+p)2/(2p)2	p=10	6.7966
	LU6RYY-5872	(1+2p+pp)/4pp	p=10	6.7966
	LUEBFM-5877	2p(1+p)/(2P)^2	p=10	2.607
	MDDEXC-5872	(1+p)2/4p2	p=10	6.797
	MFPURD-5872	(1+p)^2/4p^2	p=10	6.797
	MK4AUM-5872	((a+1)^2)/(4a^2)	a=0.2373	6.7966
	MXJMCB-5877	(1+p)^2:(2p)^2	p = 10	6.797
	N9W7AC-5872	[(1+p)^2]/[(2p)^2]	p=10	6.7966
	NHLXV6-5872	(1+p)2/(2p)2	p=10	6.796644554
	NQE6GV-5872	(1+2p+pp)/4pp	p=10	6.7966
	RERAQ7-5872	1	a=10	6.797
	TAWX69-5872	(p+1)^2/4p^2	p = 10	6.7966
	VFV2AX-5877	(1+2p+pp)/4pp	p = 10	6.7966
	VLM9UR-5877	[(1+p)/2p]^2	p=10	6.7966
	VVB37N-5872	(1+2p+pp)/(4pp)	p=10	6.7966
	XMTF94-5877			5.999
	XR3TRN-5872	(1+P)^2	10	1.53091129
	XYGF2R-5877	(1+2p+pp)/4pp	p=10	6.7966
	XZTEV2-5872	(1+p)^2/4p^2	p=10	6.797
	Z47XTZ-5872	(1+p)^2/(2p)^2	p = 10	6.7966
	ZGEE2Q-5872	(1+p)^2/4(p^2)	p = 10	0.021551897
	ZPKJP2-5877			5.999
	ZZ6PNQ-5877	(p+q+4pq)/8pq	p=q=10	1.553518753

Statistical Analysis Summary of CSF1PO **Likelihood Ratio Mode: 6.7966**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
FGA	28YEKK-5872	1/4		0.2500
	2QXD62-5872	1/4		0.2500
	2WZGXK-5877	R=2cd(ko)U=2cdSI=R/U	c=20 d=24	0.25
	3B2FKH-5872	1/4		0.2500
	4LRTVY-5872	1/4	ND	0.2500
	64TV9W-5877			0.2500
	68T76W-5877			0.2500
	693BHK-5872	1/2		0.2500
	6VDCQH-5872			0.2500
	73CYGW-5872	0.5pq/2pq	p=20 q=24	0.2500
	77QVNJ-5872	(pqrs)/4(pqrs)	p=20 q=22 r=24 s=25	0.25
	7BLMUV-5872	1/4		0.25
	93MK6P-5872	1/4	----	0.25000
	9N7PPT-5872	1/4		0.2500
	AG28UD-5877	1/4		0.2500
	AU6Q6D-5877	1/4		0.25
	CMHKJQ-5877	*	*	0.2500
	DH6229-5877	1/4		0.25000
	EF96PK-5872	1/4		0.25000
	EWGWRP-5872	1/4	-	0.2500
	F8TL97-5872	1/4		0.2500
	FPCFWA-5872	1/4		0.25
	FYHKM6-5872	1/4		0.2500
	GM2WBJ-5872	1/4		0.2500
	GNCYWH-5872	1/4		0.2500
	GREW8B-5872			0.2500
	HJFUJ4-5872	0.5		0.5
	J3K7KQ-5877	1/4	0.25	.25
	JDRAD3-5877	1/4		0.25
	JK6HE6-5877	1/4		0.25

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
FGA	LRXAZ4-5872	1/4		0.25
	LU6RYY-5872	1/4		0.2500
	LUEBFM-5877	2/4	/	0.5
	MDDEXC-5872	rs/2/2rs	r=20 s=24	0.2500
	MFPURD-5872	1/4		0.2500
	MK4AUM-5872	1/4	0.25	0.25
	MXJMCB-5877	1:4		0.250
	N9W7AC-5872	1/4		0.25000
	NHLXV6-5872	1/4		0.25
	NQE6GV-5872	1/4		0.2500
	RERAQ7-5872	Z0		0.2500
	TAWX69-5872	1/4	p = 20 q = 22 r = 24 s = 25	0.2500
	VFV2AX-5877	1/4	--	0.2500
	VLM9UR-5877	0.25		0.2500
	VVB37N-5872	1/4		0.25
	XMTF94-5877			0.2500
	XR3TRN-5872	1		1
	XYGF2R-5877	0.25		0.25
	XZTEV2-5872	1/4		0.2500
	Z47XTZ-5872	1/4		0.25
	ZGEE2Q-5872	0.25	-	0.25
	ZPKJP2-5877			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	28YEKK-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	2QXD62-5872	(1+p+q+2pq)/8pq	p=9, q=14	9.8856
	2WZGXK-5877	R=1(K2)+a(k1)+b(k1)+2ab(ko)U=2abSI=R/U	a=9 b=14	9.885
	3B2FKH-5872	(1+p+q+2pq)/8pq	p = 9 q = 14	9.8859
	4LRTVY-5872	(p+q+2pq+1)/8pq	p=9 q=14	9.885
	693BHK-5872	(1+a+b+2ab)/8ab	a = 9 b = 14	9.886
	6VDCQH-5872	(1+a+b+2ab)/8ab	A=9 B=14	9.8856
	73CYGW-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.886
	77QVNJ-5872	(2pq+p+q+1)/8pq	p = 9 q = 14	9.8856
	7BLMUV-5872	(p+q+2pq+1)/8pq	p=9 q=14	9.886
	93MK6P-5872	(1+p+q+2pq)/(8pq)	p = 9/ q = 14	9.8856
	9N7PPT-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	AG28UD-5877	(1+p+q+2pq)/8pq	p = 9 q = 14	9.8856
	AU6Q6D-5877	(1+a+b+2ab)/8ab	a=9 b=14	9.8856
	DH6229-5877	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	EF96PK-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	EWGWRP-5872	(1+p+q+2pq)/(8pq)	p=9 q=14	9.8856
	F8TL97-5872	(1+p+u+2pu)/8pu	p=9 u=14	9.8856
	FPCFWA-5872	1+p+q+2pq/8pq	p=9 q=14	9.886
	FYHKM6-5872	(1+p+u+2pu)/8pu	p=9 u=14	9.8856
	GM2WBJ-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.886
	GNCYWH-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.886
	GREW8B-5872			9.8855
	HJFUJ4-5872	(p+q+4pq)/8pq	p=9 q=14	2.79
	J3K7KQ-5877	(a+b+2ab+1)/(8ab)	a=0.2426 b=0.0702	9.8856
	JDRAD3-5877	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	JK6HE6-5877	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	LRXAZ4-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	LU6RYY-5872	(1+p+u+2pu)/8pu	p=9 u=14	9.8856

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaD	LUEBFM-5877	(p+q+4pq)/8pq	p = 9 q = 14	2.797
	MDDEXC-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.886
	MFPURD-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.886
	MK4AUM-5872	(a+b+2ab+1)/(8ab)	a=0.2426 b=0.0702	9.8856
	MXJMCB-5877	(1+p+q+2pq):8pq	p = 9 q = 14	9.886
	N9W7AC-5872	(1+p+q+2pq)/(8pq)	p=9 q=14	9.8856
	NHLXV6-5872	1+p+q+2pq/8pq	p=9 q=14	9.885642364
	NQE6GV-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	RERAQ7-5872	4	a=9 b=14	9.886
	TAWX69-5872	(1+p+q+2pq)/8pq	p = 9 q = 14	9.8856
	VFV2AX-5877	(1+p+υ+2pυ)/8pυ	p = 9 υ = 14	9.8856
	VLM9UR-5877	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	VVB37N-5872	(1+p+q+2pq)/(8pq)	p=9 q=14	9.8856
	XR3TRN-5872	1+P+Q+2PQ	P=9 Q=14	1.34686104
	XYGF2R-5877	(1+p+q+2pq)/8pq	p=9 q=14	9.8856
	XZTEV2-5872	(1+p+q+2pq)/8pq	p=9 q=14	9.886
	Z47XTZ-5872	(1+p+q+2pq)/8pq	p = 9 q = 14	9.8856
	ZGEE2Q-5872	(1+p+q+2pq)/8pq	p = 9 q = 14	9.885642364
	ZZ6PNQ-5877	(p+q+4pq)/8pq	p=9 q=14	2.795878223
Statistical Analysis Summary of PentaD			**Likelihood Ratio Mode:**	**9.8856**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaE	28YEKK-5872	(1+2p)/8p	p=25	30.0119
	2QXD62-5872	(1+2p)/8p	p=25	30.0119
	2WZGXK-5877	R=c(k1)+2ac(ko)U=2acSI=R/U	a=25 c=11	30.948
	3B2FKH-5872	(1+2p)/8p	p = 25	30.0119
	4LRTVY-5872	(2p+1)/8p	p=25	30.01
	693BHK-5872	(1+2a)/8a	a = 25	30.01
	6VDCQH-5872	(1+2a)/8a	A=25	30.0119
	73CYGW-5872	(1+2q)/8q	q=25	30.01
	77QVNJ-5872	(2p+1)/8p	p = 25	30.0119
	7BLMUV-5872	(2p+1)/8p	p=25	30.01
	93MK6P-5872	(1+2p)/(8p)	p = 25	12.042
	9N7PPT-5872	(1+2p)/8p	p=25	30.012
	AG28UD-5877	(1+2q)/8q	q = 25	30.0119
	AU6Q6D-5877	(1+2a)/8a	a=25	30.0119
	DH6229-5877	(1+2p)/8p	p=25	30.012
	EF96PK-5872	(1+2p)/8p	p=25	12.042
	EWGWRP-5872	(1+2p)/(8p)	p=25	30.0119
	F8TL97-5872	(1+2x)/8x	x=25	30.0119
	FPCFWA-5872	1+2p/8p	p=25	30.012
	FYHKM6-5872	(1+2x)/8x	x=25	30.0119
	GM2WBJ-5872	(1+2p)/8p	p=25	30.01
	GNCYWH-5872	(1+2p)/8p	p=25	30.01
	GREW8B-5872			29.7520
	HJFUJ4-5872	(1+4p)/8p	p=25	30.26
	J3K7KQ-5877	(2a+1)/8a	a=0.0042	30.0119
	JDRAD3-5877	(1+2p)/8p	p=25	30.012
	JK6HE6-5877	(1+2p)/8p	p=25	30.0119
	LRXAZ4-5872	(1+2p)/8p	p=25	30.0119
	LU6RYY-5872	(1+2x)/8x	x=25	30.0119

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaE	LUEBFM-5877	(1+4p)/8p	p=25	30.262
	MDDEXC-5872	(1+2p)/8p	p=25	30.01
	MFPURD-5872	(1+2p)/8p	p=25	30.01
	MK4AUM-5872	(2a+1)/8a	a=0.0042	30.0119
	MXJMCB-5877	(1+2p):8p	p = 25	30.01
	N9W7AC-5872	(1+2p)/(8p)	p=25	12.042
	NHLXV6-5872	1+2p/8p	p=25	30.01190476
	NQE6GV-5872	(1+2p)/8p	p=25	30.0119
	RERAQ7-5872	5	a=25	30.01
	TAWX69-5872	(2p+1)/8p	p = 25	30.0119
	VFV2AX-5877	(1+2x)/8x	x = 25	30.0119
	VLM9UR-5877	(1+2p)/8p	p=25	30.0119
	VVB37N-5872	(1+2q)/(8q)	q=25	30.0119
	XR3TRN-5872	1+2P	25	1.0084
	XYGF2R-5877	(1+2p)/8p	p=25	30.0119
	XZTEV2-5872	(1+2p)/8p	p=25	30.01
	Z47XTZ-5872	(1+2p)/8p	p = 25	12.042
	ZGEE2Q-5872	(1+2p)/8p	p = 25	30.01190476
	ZZ6PNQ-5877	(1+4p)/8p	p=25	30.26190476
Statistical Analysis Summary of PentaE			**Likelihood Ratio Mode:**	**30.0119**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
SE33	28YEKK-5872	(1+2p)/8p	p=26.2	1.9346
	2QXD62-5872	(1+2p)/8p	p=26.2	1.9346
	2WZGXK-5877	R=c(k1)+2ac(ko)U=2acSI=R/U	a=26.2 c=17	1.859
	3B2FKH-5872	(1+2p)/8p	p = 26.2	1.9346
	4LRTVY-5872	(2p+1)/8p	p=26.2	1.934
	64TV9W-5877			1.780
	68T76W-5877			1.780
	693BHK-5872	(1+2a)/8a	a = 26.2	1.935
	6VDCQH-5872	(1+2a)/8a	A=26.2	1.9346
	73CYGW-5872	(1+2q)/8q	q=26.2	1.935
	77QVNJ-5872	(2p+1)/8p	p = 26.2	1.9346
	7BLMUV-5872	(2p+1)/8p	p=26.2	1.935
	93MK6P-5872	(1+2p)/(8p)	p = 26.2	1.9346
	9N7PPT-5872	(1+2p)/8p	p=26.2	1.9346
	AG28UD-5877	(1+2q)/8q	q = 26.2	1.9346
	AU6Q6D-5877	(1+2a)/8a	a=26.2	1.9346
	CMHKJQ-5877	*	*	1.780
	DH6229-5877	(1+2p)/8p	p=26.2	1.9346
	EF96PK-5872	(1+2p)/8p	p=26.2	1.9346
	EWGWRP-5872	(1+2p)/(8p)	p=26.2	1.9346
	F8TL97-5872	(1+2a)/8a	a=26.2	1.9346
	FPCFWA-5872	1+2p/8p	p=26.2	1.935
	FYHKM6-5872	(1+2a)/8a	a=26.2	1.9346
	GM2WBJ-5872	(1+2p)/8p	p=26.2	1.935
	GNCYWH-5872	(1+2p)/8p	p=26.2	1.935
	GREW8B-5872			1.9357
	HJFUJ4-5872	(1+4p)/8p	p=26.2	2.18
	J3K7KQ-5877	(2a+1)/8a	a=0.0742	1.9346
	JDRAD3-5877	(1+2p)/8p	p=26.2	1.9346

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
SE33	JK6HE6-5877	(1+2p)/8p	p=26.2	1.9346
	LRXAZ4-5872	(1+2p)/8p	p=26.2	1.9346
	LU6RYY-5872	(1+2a)/8a	a=26.2	1.9346
	LUEBFM-5877	(1+4p)/8p	p=26.2	2.185
	MDDEXC-5872	(1+2p)/8p	p=26.2	1.935
	MFPURD-5872	(1+2p)/8p	p=26.2	1.935
	MK4AUM-5872	(2a+1)/8a	a=0.0742	1.9346
	MXJMCB-5877	(1+2p):8p	p = 26.2	1.935
	N9W7AC-5872	(1+2p)/(8p)	p=26.2	1.9346
	NHLXV6-5872	1+2p/8p	p=26.2	1.93463611
	NQE6GV-5872	(1+2p)/8p	p=26.2	1.9346
	RERAQ7-5872	5	a=26.2	1.935
	TAWX69-5872	(2p+1)/8p	p = 26.2	1.9346
	VFV2AX-5877	(1+2a)/8a	a = 26.2	1.9346
	VLM9UR-5877	(1+2p)/8p	p=26.2	1.9346
	VVB37N-5872	(1+2q)/(8q)	q=26.2	1.9346
	XMTF94-5877			1.780
	XR3TRN-5872	1+2P	26.2	1.1484
	XYGF2R-5877	(1+2p)/8p	p=26.2	1.9346
	XZTEV2-5872	(1+2p)/8p	p=26.2	1.935
	Z47XTZ-5872	(1+2p)/8p	p = 26.2	1.9346
	ZGEE2Q-5872	(1+2p)/8p	p = 26.2	30.01190476
	ZPKJP2-5877			1.780
	ZZ6PNQ-5877	(1+4p)/8p	p=26.2	2.184636119

Statistical Analysis Summary of SE33 **Likelihood Ratio Mode: 1.9346**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TH01	28YEKK-5872	(1+2p)/8p	p=9	1.1050
	2QXD62-5872	(1+2p)/8p	p=9	1.1049
	2WZGXK-5877	R=c(k1)+2ac(ko)U=2acSI=R/U	a=9 c=8	1.105
	3B2FKH-5872	(1+2p)/8p	p = 9	1.1050
	4LRTVY-5872	(2p+1)/8p	p=9	1.104
	64TV9W-5877			1.074
	68T76W-5877			1.074
	693BHK-5872	(1+2a)/8a	a = 9	1.105
	6VDCQH-5872	(1+2a)/8a	A=9	1.1050
	73CYGW-5872	(1+2q)/8q	q=9	1.105
	77QVNJ-5872	(2p+1)/8p	p = 9	1.1050
	7BLMUV-5872	(2p+1)/8p	p=9	1.105
	93MK6P-5872	(1+2p)/(8p)	p = 9	1.1050
	9N7PPT-5872	(1+2p)/8p	p=9	1.1050
	AG28UD-5877	(1+2q)/8q	q = 9	1.1050
	AU6Q6D-5877	(1+2a)/8a	a=9	1.1049
	CMHKJQ-5877	*	*	1.074
	DH6229-5877	(1+2p)/8p	p=9	1.1050
	EF96PK-5872	(1+2p)/8p	p=9	1.1050
	EWGWRP-5872	(1+2p)/(8p)	p=9	1.1050
	F8TL97-5872	(1+2r)/8r	r=9	1.1049
	FPCFWA-5872	1+2p/8p	p=9	1.105
	FYHKM6-5872	(1+2p)/8p	p=9	1.1049
	GM2WBJ-5872	(1+2p)/8p	p=9	1.105
	GNCYWH-5872	(1+2p)/8p	p=9	1.105
	GREW8B-5872			1.1051
	HJFUJ4-5872	(1+4p)/8p	p=9	1.35
	J3K7KQ-5877	(2a+1)/8a	a=0.1462	1.1049
	JDRAD3-5877	(1+2p)/8p	p=9	1.1050

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TH01	JK6HE6-5877	(1+2p)/8p	p=9	1.105
	LRXAZ4-5872	(1+2p)/8p	p=9	1.1050
	LU6RYY-5872	(1+2r)/8r	r=9	1.1049
	LUEBFM-5877	(1+4p)/8p	p=9	1.355
	MDDEXC-5872	(1+2p)/8p	p=9	1.105
	MFPURD-5872	(1+2p)/8p	p=9	1.105
	MK4AUM-5872	(2a+1)/8a	a=0.1462	1.1049
	MXJMCB-5877	(1+2p):8p	p = 9	1.105
	N9W7AC-5872	(1+2p)/(8p)	p=9	1.1050
	NHLXV6-5872	1+2p/8p	p=9	1.10499316
	NQE6GV-5872	(1+2p)/8p	p=9	1.1050
	RERAQ7-5872	5	a=9	1.105
	TAWX69-5872	(2p+1)/8p	p = 9	1.1050
	VFV2AX-5877	(1+2r)/8r	r = 9	1.1050
	VLM9UR-5877	(1+2p)/8p	p=9	1.1050
	VVB37N-5872	(1+2q)/(8q)	q=9	1.1050
	XMTF94-5877			1.074
	XR3TRN-5872	1+2P	9	1.2924
	XYGF2R-5877	(1+2p)/8p	p=9	1.1050
	XZTEV2-5872	(1+2p)/8p	p=9	1.105
	Z47XTZ-5872	(1+2p)/8p	p = 9	1.1050
	ZGEE2Q-5872	(1+2p)/8p	p = 9	1.10499316
	ZPKJP2-5877			1.074
	ZZ6PNQ-5877	(1+4p)/8p	p=9	1.35499316

Statistical Analysis Summary of TH01 **Likelihood Ratio Mode: 1.1050**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TPOX	28YEKK-5872	(1+2p+pp)/4pp	p=8	2.3424
	2QXD62-5872	(1+2p+pp)/4pp	p=8	2.3424
	2WZGXK-5877	R=1(k2)+a(k1)+a(k1)+a2(ko) U=a2SI=R/U	a=8	2.343
	3B2FKH-5872	(1+2p+pp)/4pp	p = 8	2.3424
	4LRTVY-5872	$(p+1)^2/4p^2$	p=8	2.342
	64TV9W-5877			2.262
	68T76W-5877			2.262
	693BHK-5872	(1+2a+2a^2)/4a^2	a = 8	2.342
	6VDCQH-5872	[(1+a)^2]/(2a)^2	A=8	2.3424
	73CYGW-5872	(1+p)(1+p)/4(p)(p)	p=8	2.342
	77QVNJ-5872	((p)^2+2p+1)/(2p)^2	p = 8	2.3424
	7BLMUV-5872	(p+1)^2/4p^2	p=8	2.342
	93MK6P-5872	((1+p)^2)/((2p)^2)	p = 8	2.3424
	9N7PPT-5872	(1+p)^2/(2p)^2	p=8	2.3424
	AG28UD-5877	(1+2p+pp)/4pp	P = 8	2.3424
	AU6Q6D-5877	(1+a)^2/(2a)^2	a=8	2.3424
	CMHKJQ-5877	*	*	2.262
	DH6229-5877	(1+2p+p2)/4p2	p=8	2.3424
	EF96PK-5872	(1+p)^2/(2p)^2	p=8	2.3424
	EWGWRP-5872	((1+p)^2)/(4p^2)	p=8	2.3424
	F8TL97-5872	(1+2p+pp)/4pp	p=8	2.3424
	FPCFWA-5872	(1+p)^2/4p^2	p=8	2.342
	FYHKM6-5872	(1+2p+pp)/4pp	p=8	2.3424
	GM2WBJ-5872	(1+p)^2/4p^2	p=8	2.342
	GNCYWH-5872	[(1+p)^2]/4p^2	p=8	2.342
	GREW8B-5872			2.3426
	HJFUJ4-5872	(1+p)/2p	p=8	1.53
	J3K7KQ-5877	((a+1)^2)/(4a^2)	a=0.4852	2.3424
	JDRAD3-5877	(1+2p+p2)/4p2	p=8	2.3424

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TPOX	JK6HE6-5877	(1+2p+pp)/4pp	p=8	2.342
	LRXAZ4-5872	(1+p)2/(2p)2	p=8	2.3424
	LU6RYY-5872	(1+2p+pp)/4pp	p=8	2.3424
	LUEBFM-5877	2p(1+p)/(2P)^2	p=8	1.53
	MDDEXC-5872	(1+p)2/4p2	p=8	2.342
	MFPURD-5872	(1+p)^2/4p^2	p=8	2.342
	MK4AUM-5872	((a+1)^2)/(4a^2)	a=0.4852	2.3424
	MXJMCB-5877	(1+p)^2:(2p)^2	p = 8	2.342
	N9W7AC-5872	[(1+p)^2]/[(2p)^2]	p=8	2.3424
	NHLXV6-5872	(1+p)2/(2p)2	p=8	2.342439082
	NQE6GV-5872	(1+2p+pp)/4pp	p=8	2.3424
	RERAQ7-5872	1	a=8	2.342
	TAWX69-5872	(p+1)^2/4p^2	p = 8	2.3424
	VFV2AX-5877	(1+2p+pp)/4pp	p = 8	2.3424
	VLM9UR-5877	[(1+p)/2p]^2	p=8	2.3424
	VVB37N-5872	(1+2p+pp)/(4pp)	p=8	116.7486
	XMTF94-5877			2.262
	XR3TRN-5872	(1+P)^2	8	2.20581904
	XYGF2R-5877	(1+2p+pp)/4pp	p=8	2.3424
	XZTEV2-5872	(1+p)^2/4p^2	p=8	2.342
	Z47XTZ-5872	(1+p)^2/(2p)^2	p = 8	2.3424
	ZGEE2Q-5872	(1+p)^2/4(p^2)	p = 8	0.12982295
	ZPKJP2-5877			2.262
	ZZ6PNQ-5877	(p+q+4pq)/8pq	p=q=8	1.015251443

Statistical Analysis Summary of TPOX **Likelihood Ratio Mode: 2.3424**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
vWA	28YEKK-5872	(1+p)/4p	p=17	1.2671
	2QXD62-5872	(1+p)/4p	p=17	1.2670
	2WZGXK-5877	R=b(k1)+b(k1)+2ab(ko)U=2a bSI=R/U	a=17 b=16	1.267
	3B2FKH-5872	(1+p)/4p	p = 17	1.2671
	4LRTVY-5872	(p+1)/4p	p=17	1.267
	693BHK-5872	(1+a)/4a	a = 17	1.267
	6VDCQH-5872	(1+a)/4a	A=17	1.2671
	73CYGW-5872	(1+q)/4q	q=17	1.267
	77QVNJ-5872	(p+1)/4p	p = 17	1.2671
	7BLMUV-5872	(p+1)/4p	p=17	1.267
	93MK6P-5872	(1+p)/(4p)	p = 17	1.2671
	9N7PPT-5872	(1+p)/4p	p=17	1.2671
	AU6Q6D-5877	(1+a)/4a	a=17	1.2670
	CMHKJQ-5877	*	*	1.219
	DH6229-5877	(1+p)/4p	p=17	1.2671
	EF96PK-5872	(1+p)/4p	p=17	1.2671
	EWGWRP-5872	(1+p)/(4p)	p=17	1.2671
	F8TL97-5872	(1+q)/4q	q=17	1.2670
	FPCFWA-5872	1+p/4p	p=17	1.267
	FYHKM6-5872	(1+q)/4q	q=17	1.2670
	GM2WBJ-5872	(1+p)/4p	p=17	1.267
	GNCYWH-5872	(1+p)/4p	p=17	1.267
	GREW8B-5872			1.2672
	HJFUJ4-5872	(1+2p)/4p	p=17	1.52
	J3K7KQ-5877	(a+1)/4a	a=0.2458	1.2670
	JDRAD3-5877	(1+p)/4p	p=17	1.2671
	JK6HE6-5877	(1+p)/4p	p=17	1.2670
	LRXAZ4-5872	(1+p)/4p	p=17	1.2671
	LU6RYY-5872	(1+q)/4q	q=17	1.2670

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
vWA	LUEBFM-5877	(1+2p)/4p	p=17	1.517
	MDDEXC-5872	(1+p)/4p	p=17	1.267
	MFPURD-5872	(1+p)/4p	p=17	1.267
	MK4AUM-5872	(a+1)/4a	a=0.2458	1.2670
	MXJMCB-5877	(1+p):4p	p = 17	1.267
	N9W7AC-5872	(1+p)/(4p)	p=17	1.2671
	NHLXV6-5872	1+p/4p	p=17	1.267087063
	NQE6GV-5872	(1+p)/4p	p=17	1.2671
	RERAQ7-5872	2	a=17	1.267
	TAWX69-5872	(1+p)/4p	p = 17	1.2671
	VFV2AX-5877	(1+q)/4q	q = 17	1.2671
	VLM9UR-5877	(1+p)/4p	p=17	1.2671
	VVB37N-5872	(1+p)/(4p)	p=17	1.2671
	XR3TRN-5872	1+P	17	1.2458
	XYGF2R-5877	(1+p)/4p	p=17	1.2671
	XZTEV2-5872	(1+p)/4p	p=17	1.267
	Z47XTZ-5872	(1+p)/4p	p = 17	1.2671
	ZGEE2Q-5872	(1+p)/4p	p = 17	0.04582941
	ZZ6PNQ-5877	(1+4p)/8p	p=17	1.008543531

Statistical Analysis Summary of vWA **Likelihood Ratio Mode: 1.2671**

Kinship DNA Statistics

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

TABLE 7

WebCode-Test	Kinship Index	Claim Supported?
28YEKK-5872	3,010,275	Yes
2QXD62-5872	3010275.4502	Yes
2WZGXK-5877	3228246.25	Yes
3B2FKH-5872	3,297,760	Yes
4LRTVY-5872	3010275,45	Yes
64TV9W-5877	3200	Yes
68T76W-5877	3,200	Yes
693BHK-5872	3.010E+06	Yes
6VDCQH-5872	3010275	Yes
73CYGW-5872	3.2 million	Yes
77QVNJ-5872	3,010,498.0638	Yes
7BLMUV-5872	3010275.45	Yes
93MK6P-5872	1,208,000	Yes
9N7PPT-5872	3,010,127.6	Yes
AG28UD-5877	2.375 million	Yes
AU6Q6D-5877	3.0 million	Yes
CMHKJQ-5877	4,300	Yes
DH6229-5877	3,010,127	Yes
EF96PK-5872	1.208 million	Yes
EWGWRP-5872	3.2 X 10^6	Yes
F8TL97-5872	3010275.45021	Yes
FPCFWA-5872	3012162.501	Yes
FYHKM6-5872	3010275.4502	Yes
GM2WBJ-5872	3.2 million	Yes
GNCYWH-5872	3.2 million	Yes
GREW8B-5872	2.9876E6	Yes
HJFUJ4-5872	122,589.097	Yes
J3K7KQ-5877	3010275.45	Yes
JDRAD3-5877	3,010,128	Yes

TABLE 7 - Kinship DNA Statistics

WebCode-Test	Kinship Index	Claim Supported?
JK6HE6-5877	3,01e+6	Yes
LRXAZ4-5872	3010472,4141	Yes
LU6RYY-5872	3010275.4502	Yes
LUEBFM-5877	Combined kinship index=124367	Yes
MDDEXC-5872	3.2 million	Yes
MFPURD-5872	3,200,000	Yes
MK4AUM-5872	3010275.45	Yes
MXJMCB-5877	3.010E+06	Yes
N9W7AC-5872	1,208,000	Yes
NHLXV6-5872	3010281,353	Yes
NQE6GV-5872	3,297,676	Yes
RERAQ7-5872	3,010,275	Yes
TAWX69-5872	3010275.45	Yes
VFV2AX-5877	3,010,275	Yes
VLM9UR-5877	3010275	Inconclusive
VVB37N-5872	118,408,624.6522	Yes
XMTF94-5877	3,200	Yes
XR3TRN-5872	1065.544424	Yes
XYGF2R-5877	3.0103 E+6	Yes
XZTEV2-5872	3.2 million	Yes
Z47XTZ-5872	1.208 million	Yes
ZGEE2Q-5872	2.09805E-14	No
ZPKJP2-5877	3200	Yes
ZZ6PNQ-5877	9.79 E+03	Yes

Response Summary	Participants: 53
Is the relationship claim of Hispanic Full Sibling supported?	
Yes	51
No	1
Inconclusive	1

Additional Kinship Statistical Results

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
2QXD62-5872	There is a strong evidence to indicate that A and B are full siblings. The probability of kinship is 99.9999% based on the NIST STRBASE Hispanic Population Database.
2WZGXK-5877	(k2)=(k1)=(k0)=0.25 in the formula
3B2FKH-5872	Due to dis-equilibrium between vWA & D12S391, the D12S391 results were not used in the relationship testing calculation.
3G223J-5877	H1: Alleged Father A (Item 3) is the father of the Known Child (Item 2). H2: Random, unrelated man from the population is the biological father of the Known Child (Item 2). LR=H1/H2. 1. DNA results provide extremely strong support (LR=1,96e+012) for the first proposition that Alleged Father A (Item 3) is the father of the Known Child (Item 2) rather than the alternative proposition that a random, unrelated man from the population is the biological father of the Known Child (Item 2). 2. The probability of paternity of the Alleged Father B (Item 4) in relation to the Known Child (Item 2) is excluded.
64TV9W-5877	The likelihood ratios shown above were calculated using 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 prior instead of x/N. The combined KI (Hispanic) shown above does not include vWA. vWA was removed due to possible genetic linkage with D12 per laboratory practice. The Penta D and Penta E loci were not calculated as these loci are not tested in this laboratory. The combined KI (Hispanic) is only calculated to 2 significant figures by the KinCALc software.
68T76W-5877	*The likelihood ratios were calculated with the Kin CALc 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 just x/N. The combined kinship index omits the locus vWA due to linkage disequilibrium. The Penta D and Penta E loci were not calculated as these loci are not tested in this laboratory.
693BHK-5872	The Standards for Relationship Testing Laboratories of AABB for two-party comparisons indicates: "Likelihood ratios greater than 10 shall be considered genetic evidence supporting the tested relationship". The Laboratory should have comprehensive validation studies for similar cases like the present, and stablish itsown cut-off values.
6VDCQH-5872	The laboratory's procedure for non-parentage cases requires that if alleles are shared in both of genetically linked loci D12S391 and vWA, then the LR whose multiplicative effect is closest to neutral (i.e., whose value or inverse of its value is closer to 1 than the other LR or its inverse) shall be reported as 1.00. In this case, the D12S391 LR of 0.9128 would be made 1.0000 and a CLR of 3297926 reported.
7BLMUV-5872	The genetic evidence is 3 millions times more probable if the two girls have a full sibling relation than they are unrelated.
93MK6P-5872	The shared results between Alleged Sibling A and Alleged Sibling B are 1,208,000 times more likely to be observed if they were full siblings rather than if they were unrelated.
AG28UD-5877	Profile A used as the reference sibling profile for the full sibling comparison. vWA and D12S391 are only 6.3 Mb apart and significant linkage disequilibrium has been detected. In this pedigree, the relationship index for each locus is as follows: Profile A and Profile B Comparison: • vWA (not reported): formula (1+p)/4p, allele legend p=17, likelihood ratio=1.2671; • D12S391: formula (1+2q)/8q , allele legend q=19, likelihood ratio= 0.9128. As such, D12S391 will be the only locus evaluated (unless a mutation appears in vWA). D12S391 has more alleles in its locus (23 versus 15) and more variation amongst the population statistics for each allele than vWA.

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
AU6Q6D-5877	Note: [Laboratory] performs sibling analysis using a Laboratory Specific Software and Laboratory Specific Population Database. In addition to the above manual calculations, Full sibling statistics were performed for the Southwest Hispanic (SWH) and Southeast Hispanic (SEH) population groups, following [Laboratory] standard operating procedures. The combined full sibling index for SWH was 3.5 million, probability of full sibling = 99.99% The combined full sibling index for SEH was 1.6 million, probability of full sibling = 99.99% These results support the conclusion that Profile A and B are Full siblings.
CMHKJQ-5877	* 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 probablities 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 Hispanic; therefore only values for Hispanic were reported.
DH6229-5877	Popstats was not used for calculation of Penta E due to shared allele being greater than the allowable alleles (25 vs >24). Popstats reports LR of Kinship as 1,208,000 for Hispanic Full Siblings.
EF96PK-5872	The shared results between alleged sibling 1 (A) and alleged sibling 2 (B) are 1.208 million times more likely to be observed if they were full siblings rather than if they were unrelated.
F8TL97-5872	There is strong evidence to indicate that A and B are full sibling. The probability of kindship is 99.9999% based on the NIST STRBASE Hispanic Population Database.
FPCFWA-5872	LR is 3 012 163 which means that the probability of being full siblings is 3 012 163 times the probability of being unrelated.
FYHKM6-5872	There is a strong evidence to indicate that A and B are full siblings. The probability of kinship is 99.9999% as calculated based on the NIST STRBASE Hispanic Population Database.
GREW8B-5872	The results support hypothesis 1 . Assuming an a-priori probability of 50% for both hypotheses (full siblings versus unrelated), a probability of more than 99,999% has been calculated for hypotheses 1; the tested participants are full siblings.
J3K7KQ-5877	The likelihood ratio (Kinship Index) obtained is 3,010275.45, which strongly supports the hypothesis that the two females are full siblings compared to being unrelated. This results in a probability of 99.99% that the two individuals are full siblings, based on the DNA evidence provided.
JK6HE6-5877	The observed genetic results is 3,01e+06 times more likely to occur under the scenario that the tested females are sisters, as opposed to the scenario that they are unrelated.
LU6RYY-5872	There is a strong evidence to indicate that A and B are full siblings. The probability of kinship is 99.9999% as calculated based on the NIST STRBASE Hispanic Population Database.
MFPURD-5872	Per laboratory policy, D12S391 genetic locus not used for statistical analysis and combined kinship index value truncated to two significant figures.
MK4AUM-5872	The likelihood ratio (Kinship Index) obtained is 3,010275.45, which strongly supports the hypothesis that the two females are full siblings compared to being unrelated. This results in a probability of 99.99% that the two individuals are full siblings, based on the DNA evidence provided.
N9W7AC-5872	The shared results between Alleged Siblings A and B are 1.208 million times more likely to be observed if they were full siblings rather than if they were unrelated.
NQE6GV-5872	Locus D12S391 omitted from calculation due to linkage disequilibrium with vWA.
RERAQ7-5872	equation 1 = (Z1/(pa)(pa)) + (Z2/pa)+Z0. equation 2 = (z1/2pa)+Z0. equation 3 = (z1/2pa)+Z0. equation 4 = ((2Z2 +Z1(pa+pb))/4papb + Z0. equation 5 = (Z1/4pa) + Z0 where Z0= 0.25, Z1=0.5, Z2=0.25.

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
TAWX69-5872	Is 3010275.45 times more likely if the INDIVIDUAL A analyzed is a full sibling (from father and mother) of INDIVIDUAL B than if it is another individual from the reference population.
VFV2AX-5877	Based on the autosomal STRs, the probability of the tested relationship is 99.99997% compared to two unrelated individuals of Hispanic ancestry.
VLM9UR-5877	According to the SOP of our laboratory, there are no principles for the value of the kinship index that needs to be reached to determine the relationship of full siblings. The relationship of full siblings we determine is inconclusive.
VVB37N-5872	vWA was ignored in the test due to possible linkage with D12S391. The chance of generating a false positive with a CRI of greater than 10 is less than 1.51%.
W763VX-5872	The laboratory does not perform the statistical calculation of sibling relationships with a single sibling, when metadata (additional information about the case) is not available.
XMTF94-5877	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.
XYGF2R-5877	AABB standards would require that the report states: The genetic evidence supports the relationship of A and B as first-degree relatives such as full siblings. Pu and Linacre have shown at a likelihood ratio greater than or equal to 10 that STR test results correctly confirm sibship among known sibling pairs greater than 99% of the time. (Systematic evaluation of sensitivity and specificity of sibship determination by using 15 STR loci. Pu and Linacre. Journal of Forensic and Legal Medicine 15 (2008) 329–334.)
XZTEV2-5872	D12S391 not included in combined kinship index per policy.
Z47XTZ-5872	The shared results between Alleged Sibling 1 (A) and Alleged Sibling 2 (B) are 1.208 million times more likely to be observed if they were full siblings rather than if they were unrelated.
ZPKJP2-5877	*The likelihood ratios were calculated with the Kin CALc 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 just x/N. Combined kinship index omits the locus vWA due to linkage disequilibrium.

Additional Comments

TABLE 9

WebCode-Test	Additional Comments
28YEKK-5872	For "Kinship DNA - PART III" [Table 6 - Kinship Likelihood Ratio Results] allele frequencies used to report individual LR and kinship index were the ones included in the table provided in this section.
2K6B22-5872	The most conservative statistic (lowest PI or LR) is included in the report (Caucasian). The laboratory does not report out the probability of parentage (%). The laboratory does not do hand calculations for kinship statistics.
2QXD62-5872	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 2, 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 2, 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. Remark: 'NM' denotes non-male profile.
32CRNU-5872	vWA and SE33 are not included for statistics calculations per lab SOP.
36PRKL-5877	Our laboratory does not produce PI calculations.
3CU9F2-5872	The most conservative statistic (lowest PI or LR) is included in the report (Caucasian). The laboratory does not report out the probability of parentage (%). The laboratory does not do hand calculations for kinship statistics.
496J9T-5872	vWA & SE33 are not used for statistical calculations per lab SOP. No YSTR testing or additional loci tested at the [Laboratory]. Kinship statistics are not applicable.
4LRTVY-5872	1. The acronym ND, refers to No Data. 2. In the section of Part II [Table 5 - Paternity DNA Statistics & Conclusions]: "PATERNITY DNA STATISTICS", given the ethnic origin of our laboratory, the NIST-STRBASE database for the Hispanic population is used.
64TV9W-5877	For the paternity statistics, the likelihood ratios entered were calculated using 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 prior instead of x/N. The combined PI (Caucasian) shown above does not include D12. D12 was removed due to possible genetic linkage with vWA per laboratory practice. The Penta D and Penta E loci were not calculated as these loci are not tested in this laboratory. This laboratory does not report probability of paternity so this value was not calculated.
68T76W-5877	The likelihood ratios calculated with the Kin CALc 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 just x/N. The combined kinship index omits the locus vWA due to linkage disequilibrium. The Penta D and Penta E loci were not calculated as these loci are not tested in this laboratory.

TABLE 9

WebCode-Test	Additional Comments
73CYGW-5872	D12S391 is excluded from all final calculations as per laboratory policy. The final combined paternity index and final combined kinship index are truncated to 2 significant figures per laboratory policy. The probability of paternity is truncated to 4 places past the decimal point per laboratory policy.
8D9NCN-5872	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 (15), vWA (18), D16 (11), CSF (13), TPOX (8), D8 (11 or 13), D21 (30), D18 (14), D2S441 (11.3), D19 (14), TH01 (8), FGA (24), D22 (15), D5 (13), D13 (8), D7 (8), SE33 (19), D10 (15), D1 (16), D12 (23), and D2S1338 (25). RMNE report statement: The expected frequency of individuals who could be the father of Caucasian Son is less than 1 in 100 billion in the general male population. NR = No Results
93MK6P-5872	Part II [Table 5 - Paternity DNA Statistics & Conclusions]: It is our laboratory policy to report the lowest LR of the selected population groups/ethnicities calculated with PopStats. vWA is not used in our statistical kinship calculations. Assuming prior probabilities of 10%, 50%, and 90%, the probability of paternity in this case is greater than 99.99%. Part III [Table 6 - Kinship Likelihood Ratio Results]: The PopStats software was used to calculate the likelihood ratio values based on the NIST STRBASE database allele frequencies. The software uses locus specific, minimum allele frequencies that may result in different likelihood ratios being reported than if they were hand calculated using the frequencies provided in this test.
9N7PPT-5872	For the DNA Paternity Statistics Part II [Table 5 - Paternity DNA Statistics & Conclusions]: For the locus and Combined Paternity Index values, our laboratory protocol is to report the smallest CPI calculated in PopStats of the selected population groups/ethnicities. Assuming prior probabilities of 10%, 50%, and 90%, the probability of paternity in this case is greater than 99.99%. The following locus was not used in the statistical calculation: vWA For Part III [Table 6 - Kinship Likelihood Ratio Results]: The calculations were done manually.
ACKZ7D-5877	SE33 was not used for stats as per laboratory policy.
AG28UD-5877	vWA and D12S391 are only 6.3 Mb apart and significant linkage disequilibrium has been detected. In this pedigree, the relationship index for each locus is as follows: Items 1,2,3 Comparison: • vWA = 4.9456 (not reported); • D12S391 = 7.2150. Items 1,2,4 Comparison: • vWA = 2.4728 (not reported); • D12S391 = 7.2150. As such, D12S391 will be the only locus evaluated (unless a mutation appears in vWA). D12S391 has more alleles in its locus (23 versus 15) and more variation amongst the population statistics for each allele than vWA.
AQM9AM-5872	vWA and SE33 are not statistically calculated for this test due to laboratory standard operating procedures. No YSTR testing or additional loci tested at this lab. Kinship statistics are not applicable.
AU6Q6D-5877	NR = no result
C3AGKL-5872	Part 2 [Table 5 - Paternity DNA Statistics & Conclusions]: Paternity DNA Statistics. Paternity Index not calculated for Item 4 due to exclusion. Part 3 [Table 6 - Kinship Likelihood Ratio Results]: Kinship DNA Statistics. Outside of laboratory scope. Not calculated.
CMHKJQ-5877	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 D12S391 was omitted due to linkage with VWA. The Individuals were reported to be Caucasian; therefore only values for Caucasian were reported.
CNUJFK-5872	VWA and SE33 are not statistically considered for this test due to laboratory standard operating procedures. No Y-STR testing or additional loci tested at this lab. Kinship statistics are not applicable.

TABLE 9

WebCode-Test	Additional Comments
DH6229-5877	[Laboratory] DNA unit reports the three major ethnic group statistics in reports, regardless of the reported races of the individuals.
EF96PK-5872	Part II [Table 5 - Paternity DNA Statistics & Conclusions]: The locus vWA was not used in the statistical calculation. Per laboratory policy, the vWA locus will not be used for statistical evaluations when complete profiles are used for kinship comparisons. For the locus and Combined Paternity Index values, our laboratory is to report the smallest CPI calculated in PopStats of the selected population groups/ethnicities. The probability of paternity was calculated assuming prior probabilities of 10%, 50% and 90%. Part III [Table 6 - Kinship Likelihood Ratio Results]: The PopStats software was used to calculate the likelihood ratio values based on the NIST STRBASE database allele frequencies. The software uses locus specific, minimum allele frequencies that may result in different likelihood ratios being reported than if they were hand calculated using the frequencies provided in this test.
EWGWRP-5872	Part I [Table 2 - Paternity Index Results, Items 3 & 4]: 1) The laboratory does not use D12S391 for paternity 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 - Paternity DNA Statistics & Conclusions]: 1) The laboratory uses the all-ethnicities dataset (n=1036) for paternity DNA statistics. 2) '^' refers to 'to the power of'. 3) The laboratory uses a prior probability of 0.5 to calculate the Probability of Paternity. Part III [Table 6 - Kinship Likelihood Ratio Results]: 1) The laboratory does not use D12S391 for kinship DNA statistics.
F8TL97-5872	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 1, Item 2, Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 Gene Amp 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 2, Item 3 and Item 4 (Y-Filer). 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. Remark: 'NM' denotes non-male profile.
FPTVPG-5872	Our laboratory does not report Probability of Paternity
FYHKM6-5872	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 the 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 2, Item 3 and Item 4 were 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 2, 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. Remark: 'NM' denotes non-male profile.

TABLE 9

WebCode-Test	Additional Comments
GHNEU2-5872	Any labeled peaks seen in samples that are likely due to PCR/STR artifacts were not report. DYS391 is reported as INC for the PowerPlex Fusion System as per laboratory policy.
GM2WBJ-5872	Part I [Table 1 - STR Results] and II [Table 5 - Paternity DNA Statistics & Conclusions]: 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. Part III [Table 6 - Kinship Likelihood Ratio Results] The individual locus LRs 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.
GNCYWH-5872	D12S391 is omitted from the paternity calculation and from the Kinship calculation (sibling), as 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. The Kinship Index (Sibling Index) is truncated to 2 significant figures per laboratory protocol. A possible duplication at DYS319 for Item 3 was noted.
H6EVV8-5872	NR = No result. Power Plex Fusion and YFiler concordant at DYS391 for Item 2. Power Plex Fusion and YFiler concordant at DYS391 for Item 3. Power Plex Fusion and YFiler concordant at DYS391 for Item 4.
H87UA6-5877	SE33 not used for statistics in laboratory procedure
J3K7KQ-5877	The samples were processed using the kits mentioned in the previous sections, as well as an additional kit, MainstAY. This is where the results for the markers Penta E, Penta D, and D6S1043 were obtained. For marker Penta E of Item 3, we detected the small allele 16 in addition to allele 7. However, since allele 16 did not cross the threshold established by the laboratory, it was not included in the statistical analysis. Statistical analysis was performed with the hispanic database.
JA7P7D-5872	Our lab only reports the combined CPI, not a particular ethnic group. Our lab only calculates a CPI, not a probability of paternity. If an alleged parent is excluded, we do not calculate stats for that person. We do not include vWA in stats. Our lab only does paternity cases, not any other family relationship.
JDRAD3-5877	The Caucasian PI was reported for the paternity statistics of individual loci because that is the race listed on the submittal information. However, per proficiency instructions, the combined PI was reported for Part II [Table 5 - Paternity DNA Statistics & Conclusions]: Paternity DNA Statistics question 2.
JQG7E2-5877	We have used an FST value of 0%. If this was a criminal paternity case we would use FST value 3%
JRAYAK-5872	PI is not calculated when an individual is excluded as the biological father of the offspring. The laboratory does not use D12 when calculating statistics for related individuals. The laboratory does not calculate kinship statistics for Y-STR results; therefore, Y-STR analysis was not performed in the proficiency test.

TABLE 9

WebCode-Test	Additional Comments
LU6RYY-5872	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 the 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 the 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 2, 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 (Globafiler Express). -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 2, 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. Remark: 'NM' denotes non-male profile.
LUP9E2-5877	[Laboratory] is not currently online with kinship statistics.
M2HZZZ-5877	The [Laboratory] does not use SE33 in the calculation of PI and Probability of Paternity.
MDDEXC-5872	Parts I [Table 1 - STR Results] and II [Table 5 - Paternity DNA Statistics & Conclusions]: *Individual locus PIs are rounded to three significant figures. *The Combined Paternity Index value excluded D12S391 and is truncated to 2 significant figures, per Department policy. *The Probability of Paternity is truncated at 4 places past the decimal, per Department policy. Part III [Table 6 - Kinship Likelihood Ratio Results]: *Individual locus LRs are rounded to 4 significant figures. *The Combined Kinship Index value excluded D12S391 and is truncated to 2 significant figures, per Department policy.
MJKHA7-5872	Only calculating stats for included reference sample, as per SOP. Therefore, no P1 values for excluded reference samples.
MK4AUM-5872	The samples were processed using the kits mentioned in the previous sections, as well as an additional kit, MainstAY. This is where the results for the markers Penta E, Penta D, and D6S1043 were obtained. For marker Penta E of Item 3, we detected the small allele 16 in addition to allele 7. However, since allele 16 did not cross the threshold established by the laboratory, it was not included in the statistical analysis. Statistical analysis was performed with the hispanic database.
MM26J6-5872	CURRENTLY, THE LABORATORY DOES NOT DO SIBSHIP TEST
N2ZCBE-5877	D12S391 was not used in paternity calculation. Lab policy: The vWA and D12S391 loci are located on the p arm of chromosome 12. These loci were determined to be independent at the population level for calculation of RMP and CPI statistics. However, for kinship analysis/parentage calculations, the loci cannot be assumed to be independent. For kinship/parentage statistics, either the vWA or D12S391 locus can be included, but not both. As the default, the vWA locus should be used for these statistics. Be aware, there will be situations where vWA is not useful in discriminating the relationship of the individuals tested and the D12S391 locus should be used.
N9W7AC-5872	Part I [Table 1 - STR Results] and II [Table 5 - Paternity DNA Statistics & Conclusions]: For Locus and Combined Paternity Index (CPI) values, our laboratory protocol is to report the lowest CPI calculated in PopStats for the selected population sub-group. Assuming prior probabilities of 10%, 50%, and 90%, the probability of paternity in this case is greater than 99.99%. The following Locus is not used for Paternity Index calculations: vWA. Part III [Table 6 - Kinship Likelihood Ratio Results]: The PopStats software was used to calculate the likelihood ratio values based on the NIST STRBASE database allele frequencies. The software uses locus specific, minimum allele frequencies that may result in different likelihood ratios being reported than if they were hand calculated using the frequencies provided in this test.

TABLE 9

WebCode-Test	Additional Comments
NZ7NV4-5872	NR = No Result. Power Plex Fusion and YFiler Results concordant at DYS391 for Items 2, 3, and 4.
P3RPDX-5877	We do not report the probability of paternity, nor do we calculate statistics long-hand, which is why the challenge question was not answered. The PI was given at each locus for only Alleged Father A, truncated to 3 significant figures, and vWA was omitted due to being less informative than D12. The PI was not given for Alleged Father B due to being excluded, as he does not have each obligate paternal allele.
P4Y6K4-5872	1) In the DYS391 marker of item 1, it is reported as not applicable; because it is a specific marker for the "Y" chromosome, commonly found only in males. 2) The statistical analysis of biological kinship is carried out considering the allelic frequencies of the mixed race population of western Mexico. 3) Regarding the "Y" chromosome haplotype of the samples identified as item 2 and item 3, it is observed that both are coincident in all the genetic markers analyzed, so it is not excluded that they belong to the same paternal lineage.
Q2R9E6-5872	Per our SOP, statistics were not calculated in vWA or SE33.
QJ8HE7-5872	Our lab does not us vWA or SE33 in Paternity statistics.
RERAQ7-5872	Probability of Paternity not used in this laboratory. Combined paternity index is based solely on the autosomal data. Autosomal-STR and Y-STR results are not combined.
RKZQZV-5872	Kinship DNA Analysis: Our laboratory policies does not allow to calculate this sibilings relationships. In order to establish this type of relationship, our lab request other members of the family.
TAWX69-5872	PART I, DNA Analysis for Item 4 [Table 2 - Item 4PI - Paternity Index Results]: The laboratory does not perform any statistical analysis if more than three exclusions are observed. For that reason, the blanks provided for PI of the excluded systems were filled as "Exclusion". For calculations of part II [Table 5 - Paternity DNA Statistics & Conclusions]: Paternity DNA Statistics, the software Familias 3.2.2 was used.
TCHHCX-5872	WE DIDN'T USE THE ALLELE SE33 BECAUSE IN THE ACTUAL VERSION OF OUR M-FISYS SOFTWARE IS NOT INCORPORATED YET. THE ALLELE D6S1043 IS NOT PART OF THE KIT POWERPLEX FUSION 6C, THE ONE WE ACTUALLY USE IN THE LAB. THE ITEM NUMBER 3 CANNOT BE EXCLUDED AS BIOLOGICAL FATHER OF THE CHILD(ITEM 2) IN THE ITEM NUMBER 4 THERE WAS AN EXCLUSION OF THE INDIVIDUAL AS BIOLOGICAL FATHER AS THE CHILD (ITEM 2). THEREFORE WE DIDN'T REALIZE THE STATISTICAL CALCULATION.
W763VX-5872	Notes: For the statistical analysis of paternity, the information provided that these are Caucasian individuals, was not considered because the laboratory performs paternity calculations using national allele frequencies. The marker CSF1PO appears in the tables as LCR1PO, due to a program error. Only the paternity test was carried out, since it is the one scheduled as a proficiency test for this year 2024.
W7LWW8-5872	The most conservative statistic (lowest PI or LR) is included in the report (Caucasian). The laboratory does not report out the probability of parentage (%). The laboratory does not perform hand calculations for kinship statistics.
WR449Z-5872	vWA and SE33 excluded in stat calculations due to linkage and high mutation rate

TABLE 9

WebCode-Test	Additional Comments
WUBL8W-5872	The Y chromosome data is not reported due to the reach of the accreditation analysis. There is also no paternity rate data due to the laboratory M-FISys database analysis, in which the paternity rates for each allelic marker and combined paternity rates are calculated and provided by the software analysis. It is also important to highlight that the allelic markers D2S441, D10S1248, SE33, and D22S1045 are evaluated in the database analysis to generate coincidences, but the statistical analysis does not consider them due to the fact that there are no reported parameters of allelic frequencies in population studies of the mixed population in [Country]. There is also no likelihood ratio calculation of paternity rate for this markers.
XMTF94-5877	For Part I [Table 2 - Paternity Index Results, Items 3 & 4] - PI values at specific loci, Part II [Table 5 - Paternity DNA Statistics & Conclusions] - Combined PI value, and Part III [Table 6 - Kinship Likelihood Ratio Results] - Kinship DNA Statistics: 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. For Part II [Table 5 - Paternity DNA Statistics & Conclusions]: our laboratory does not report Probabilities of Paternity.
YETBUT-5872	For paternity testing, DNA View software was used to calculate LRs, which were reported as the Combined Paternity Index value. The laboratory does not report a probability of paternity. Individual locus PIs were not reported for Item 4 as the DNA View software was used as a screening method and excluded Item 4 as the father. Under Item 3 "linked" was reported for the vWA PI since it is linked with D12S391 for all calculations.
Z47XTZ-5872	For part II [Table 5 - Paternity DNA Statistics & Conclusions], the locus vWA was not used in the statistical calculation. Per laboratory policy, the vWA locus will not be used for statistical evaluations when complete profiles are used for kinship comparisons. For the locus and Combined Paternity Index values, our laboratory is to report the smallest CPI calculated in PopStats of the selected population groups/ethnicities. The probability of paternity was calculated assuming prior probabilities of 10%, 50%, and 90%. Part III [Table 6 - Kinship Likelihood Ratio Results]: The Popstats software was used to calculate the likelihood ratio values based on the NIST STRBAS database allele frequencies. The software uses locus specific, minimum allele frequencies that may result in different likelihood ratios being reported than if they were hand calculated using the frequencies provided in this test.
ZPKJP2-5877	*The likelihood ratios were calculated with the Kin CALc 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 just x/N. Combined kinship index omits the locus vWA due to linkage disequilibrium.

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 24-5872: DNA Parentage

DATA MUST BE SUBMITTED BY **Oct. 21, 2024, 11:59 p.m. EDT** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A WebCode: MAYGPP

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, son, and two alleged fathers. Your laboratory is tasked with examining the blood standards and comparing the DNA profiles.

Items Submitted (Sample Pack DPF3 - FTA Microcards):
Item 1: Blood Sample from Known Parent (Caucasian Mother)
Item 2: Blood Sample from Known Child (Caucasian Son)
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						

YSTR results are for proficiency concordance only.

YSTR 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. Plus, 23, etc.).

☐ YFiler™ ☐ PowerPlex® Y Other

Alleles below are sorted in **Default** *order.*

ITEM	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
2									
ITEM	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
2									
ITEM	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
2									

Part I (continued): DNA Analysis for Item 3

Please refer to the 'Part II: Paternity DNA Statistics' section of this data sheet regarding the suggested Population Database(s) to use to determine PI values. Report a minimum of three significant figures in your PI values.

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
3 STR						
3 PI						
ITEM	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
3 STR						
3 PI						
ITEM	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
3 STR						
3 PI						
ITEM	FGA	Penta D	Penta E	SE33	TH01	TPOX
3 STR						
3 PI						
ITEM	vWA	DYS391	DYS570	DYS576	Y Indel	
3 STR						
3 PI						

YSTR results are for proficiency concordance only.

YSTR 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. Plus, 23, etc.).

☐ YFiler™ ☐ PowerPlex® Y Other

Alleles below are sorted in **Default** *order.*

ITEM	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
3									
ITEM	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
3									
ITEM	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
3									

Part I (continued): DNA Analysis for Item 4

Please refer to the 'Part II: Paternity DNA Statistics' section of this data sheet regarding the suggested Population Database(s) to use to determine PI values. Report a minimum of three significant figures in your PI values.

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
4 STR						
4 PI						
ITEM	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
4 STR						
4 PI						
ITEM	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
4 STR						
4 PI						
ITEM	FGA	Penta D	Penta E	SE33	TH01	TPOX
4 STR						
4 PI						
ITEM	vWA	DYS391	DYS570	DYS576	Y Indel	
4 STR						
4 PI						

YSTR results are for proficiency concordance only.

YSTR 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. Plus, 23, etc.).

☐ YFiler™ ☐ PowerPlex® Y Other

Alleles below are sorted in **Default** *order.*

ITEM	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
4									
ITEM	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
4									
ITEM	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
4									

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

Select which of the alleged fathers below cannot be excluded as the biological parent of the child (Item 2) and answer the remaining questions based on your selection.

○ Item 3 - Alleged Father A ○ Item 4 - Alleged Father B

For the selected alleged parent, please utilize your own lab protocols regarding ethnicity and choose one of the following population databases for all statistical calculations in this test:
1. **FBI Popstats**: If FBI Popstats is already available in your laboratory then you may select that option, otherwise use the population database below.
2. **NIST-STRBASE** is a publicly available U.S. population dataset at STRBASE on the following NIST web site: https://strbase.nist.gov/Information/NIST_Population_Data#1036LB
    a. On the NIST web site, access the population database by selecting the hyperlink labeled "Revised allele frequencies file" under the title "Autosomal STRs: NIST U.S. Population Dataset (n = 1036)."
3. If you are unable to use one of the suggested population databases, report the population database used in the blank provided next to the 'Other Pop. Database' option. Due to the tendency for allele frequencies to vary amongst different databases, no consensus value will be determined for this option. When reporting a population database name, please refrain from using terms that would allude to a laboratory specific name or location; general terms such as 'local/state database' or 'laboratory specific database' are preferred.
4. If you did not calculate paternity statistics, please provide an explanation in your additional comments.

1. Choose a Population Database:

    ☐ **FBI Popstats Pop. Database:** ☐ **NIST STRBASE Pop. Database:**

    Other Pop. Database:

2. Record the Combined Paternity Index value:

3. 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 Hispanic 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	17.3,17.3	17.3,17.3	17.3: 0.1483				
D2S1338	20,22	17,23	17: 0.1695	20: 0.1271			
			22: 0.0572	23: 0.1398			
D2S441	10,11	11,15	10: 0.3369	11: 0.2987			
			15: 0.0487				
D3S1358	15,18	16,18	15: 0.3220	16: 0.2797			
			18: 0.1229				
D5S818	12,12	7,12	7: 0.0339	12: 0.3390			

Locus	A	B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
D7S820	8,10	8,9	8: 0.1208	9: 0.0911			
			10: 0.3072				
D8S1179	13,13	13,13	13: 0.2733				
D10S1248	13,14	13,13	13: 0.2733	14: 0.3390			
D12S391	17,19	18,19	17: 0.0763	18: 0.1780			
			19: 0.1886				
D13S317	12,13	9,12	9: 0.1653	12: 0.2352			
			13: 0.1059				
D16S539	11,12	11,12	11: 0.2648	12: 0.2775			
D18S51	14,16	14,20	14: 0.1610	16: 0.1250			
			20: 0.0275				
D19S433	14,14	14,15	14: 0.3538	15: 0.1356			
D21S11	28,30	28,30	28: 0.0996	30: 0.2733			
D22S1045	15,15	15,15	15: 0.4258				

Locus	A	B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
CSF1PO	10,10	10,10	10: 0.2373				
FGA	22,25	20,24	20: 0.0847	22: 0.1653			
			24: 0.1419	25: 0.1186			
PentaD	9,14	9,14	9: 0.2426	14: 0.0702			
PentaE	8,25	11,25	8: 0.0254	11: 0.0763			
			25: 0.0042				
SE33	15,26.2	17,26.2	15: 0.0360	17: 0.0763			
			26.2: 0.0742				
TH01	7,9	8,9	7: 0.2966	8: 0.0911			
			9: 0.1462				
TPOX	8,8	8,8	8: 0.4852				
vWA	17,17	16,17	16: 0.2839	17: 0.2458			

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

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

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

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

Part IV: ADDITIONAL COMMENTS

Comments regarding any part of this Test.

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

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)

_____