



DNA Parentage Test No. 25-5872/7

Summary Report

Each participant received a sample pack consisting of four blood samples representing a paternity case, which they were asked to analyze using their existing protocols. The test also included a paper kinship exercise where participants were asked to evaluate the provided DNA profiles and determine if a Hispanic Half-Sibling relationship claim was supported. Data were returned from 105 participants and are compiled into the following tables:

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

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

Manufacturer's Information

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

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

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

KINSHIP EXERCISE: The test also included a kinship exercise comparing autosomal DNA profiles from two related individuals, presented as a Hispanic Half-Sibling relationship.

VERIFICATION: Predistribution results were consistent with each other and the manufacturer's preparation information. Concordant allelic results were obtained for all STR loci. YSTR concordance could not be confirmed as results were submitted by only one participant.

Item	Donor Information	Volumes per Substrate (µL)	
		FTA™ Micro Cards (5872)	Swabs (5877)
1	Caucasian Mother	75	100
2	Caucasian Son	75	100
3	Caucasian Non-Biological Father	75	100
4	Caucasian Biological Father	75	100

Amelogenin and STR Results

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

Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	
1	12,16.3	17,25	11,15	15,15	10,12	11,12
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16	NM	NM	NM	NM	
2	12,17.3	17,19	11,15	15,17	10,11	11,12
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	12,14	5,10	29.2,29.2	9.3,9.3	8,8
	14,16	11	16	15	2	
3	12,17.3	17,19	10,10	16,17	11,12	12,12
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7	16,29.2	8,9	8,11
	14,17	11	19	16	2	
4	15.3,17.3	19,21	10,15	15,17	11,14	11,11
	10,11	12,12	13,15	17.3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11	20,29.2	9.3,9.3	8,11
	16,19	11	16	15	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	36,39	14	11,13	13	29	25	11	14	13
	15	12	12	18	30	17	17	11	23
	38	13	12	16	15	21	24	10	12
3	37,37	14	14,15	12	28	23	11	11	14
	16	10	11	20	28	14	16	10	25
	42	11	12	19	16	21	21	13	11
4	36,39	14	11,13	13	29	25	11	14	13
	15	12	12	18	30	17	17	11	23
	38	13	12	16	15	21	24	10	12

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

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 - Grand Mean $\pm$ 3STD Range**					
0.337-7.7	3.08-5.04	0-0.0037	1.95-2.84	1.12-1.71	*
3.55-6.06	0-0.00479	0-0.662	0-0.0042	1.16-2.17	0-0.00477
0-0.708	1.05-2.18	0-0.00119	1.01-2.04	-	0.544-0.97
1.65-4.94	0-0.00175	0-0.000782	1.6-16.5	0-0.351	0.759-1.15
1.15-2.13					
4PI - FBI Popstats					
2.54-4.52	2.44-4.73	1.13-1.53	2.33-2.42	0.992-1.6	*
2.25-2.63	5.16-8.28	2.23-3.26	4.01-5.27	1.53-1.74	22.2-29.8
2.28-4.63	1.48-1.74	3.56-6.31	1.18-1.71	-	1.41-1.71
2.57-3.9	*	*	1.23-11.3	2.08-4.36	0.832-1.03
1.54-1.73					
4PI - Grand Mean $\pm$ 3STD Range**					
0.434-7.35	2.25-5.4	0-1.73	1.7-3.44	0-1.92	0.931-1.78
1.42-3.14	0-9.78	1.52-3.19	2.04-6.42	0.546-2.39	6.42-60.8
0-4.23	0.654-2.08	2.86-7.53	1.09-2.11	-	1.06-1.83
0-5.88	0-6.05	0-9.87	1.21-17.9	0-23.9	0.775-1.22
0.523-2.17					
4PI - NIST-STRBASE					
3.11-4.43	2.99-5.05	0.942-1.53	2.19-2.59	1.25-1.56	*
1.9-2.93	4.69-7.4	2.34-2.69	4.06-4.89	1.2-2.16	17.1-35.6
2.45-3.43	1.24-1.98	4.37-6.48	1.3-1.77	-	1.16-1.81
1.95-4.64	2.82-6.14	6.27-6.91	5.79-11.6	1.36-4.66	0.875-1.04
1.23-2.08					

* 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 data submitted for the associated locus and calculating 3 standard deviations above and below that value. Data values are presented in three significant figures. Data values less than zero are presented as "0."

Summary Comments

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

Data were returned from 105 participants.

DNA Analysis

For STR results, consistent results were achieved by all but six participants.

For YSTR results, consistent results were achieved by all but three participants.

Paternity DNA Statistics

All participants reported that the source of Item 4 could not be excluded as the biological father of Item 2. Of the participants that reported probability of paternity values, all reported 99.9% or higher.

Kinship DNA Statistics

Forty-four participants submitted responses to the paper kinship exercise regarding the claim of a Hispanic Half-Sibling relationship. For the loci likelihood ratio data, nine participants reported extreme data in comparison to the calculated mode at one or more loci. A consensus was achieved, with thirty-seven participants (84%) concluding that the relationship claim was supported. Of the remaining participants, one concluded the relationship claim was not supported and six 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

26MY2N-5872 PowerPlex® Fusion (DNABView)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

2GGFQP-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

37DKA7-5877 Investigator® 24plex (Popstats)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

3ARHDM-5872 PowerPlex® 21

1	12,16.3	17,25		15,15	10,12	11,12
	12,12	10,14		18,18	11,12	12,13
	14,15	13,14	29,31.2		X,X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

3C2ANN-5872 PowerPlex® Fusion (Familias v.3.2.8)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

3LRVTM-5872 PowerPlex® Fusion, MiniFiler

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16	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

3NA8CP-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

48HUE9-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

6KKKUL-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

77ZHP3-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	Not detected			Not detected	

79BAXH-5877 GlobalFiler™, VeriFiler Plus (eDNA)

1	12,16.3	17,25	11,15	15	10,12	11,12
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

79RJT6-5872 GlobalFiler™ Express (DNAView)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NM			NM	

TABLE 1

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

Item 1 - STR Results

7AM2U7-5872 PowerPlex® Fusion 6C (eDNA)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

7CQUMJ-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

7EBBY6-5877 Qiagen Investigator ESSplex SE QS (Familias 3.2.8)

1	12,16.3	17,25	11,15	15,15		
		10,14	14,15	18,18		12,13
	14,15	13,14	29,31.2	15,16	X,X	
	20,21			17,29.2	7,9.3	
	14,16					

7FP7MP-5872 GlobalFiler™ (DBLR V1.3.35)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

7GMQT7-5872 GlobalFiler™ (Genoproof 3.0.7)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

7K2W9K-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

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

7M8GX7-5872 PowerPlex® Fusion (KIn CALc 5.0.12)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16	Inconclusive				

7NK9N2-5877 PowerPlex® Fusion 6C

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

7Q8TU6-5872 GlobalFiler™ Express (DNAnView)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NM			NM	

87E42P-5877 PowerPlex® Fusion 6C

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

8D2WB4-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	no result			no result	

8UZ9J6-5877 GlobalFiler™ (4D SDNADB v18)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	F				

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

9HP47G-5872 PowerPlex® 21 (Kinship)

1	12,16.3	17,25		15,15	10,12	11,12
	12,12	10,14		18,18	11,12	12,13
	14,15	13,14	29,31.2		X,X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

9ZLNM2-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	ND			ND	

ARBL22-5872 GlobalFiler™ Express (DNView)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NM			NM	

BB2Y8D-5872 PowerPlex®

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

BFAMKE-5877 PowerPlex® 5C

1	12,16.3	17,25	11,15	15	10,12	--
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	--	7,9.3	8,9
	14,16	--	--	--	--	

BWU2L-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

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

C68HBD-5877 Verifier Express (GeneMapper ID-X v1.6)

1	12,16.3	17,25	11,15	15	10,12	11,12
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

C8D3YD-5872 GlobalFiler™ Express (PopStats)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

CDHLGC-5877 PowerPlex® Fusion 6C

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

CVHUHW-5872 PowerPlex® Fusion (PopStats)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

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

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

D7VFXB-5877 PowerPlex® 16HS, ESX17Fast (CODIS/Popstats)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	XX	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

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

DHTC2X-5872 PowerPlex® FUSION 5C, 21, GlobalFiler™ (Familias)

1	12,16.3	17,25	11,15	15,15	10,12	11,12
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

DYD32W-5877 GlobalFiler™ (PopStats)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

E94TFC-5872 PowerPlex® Fusion, MiniFiler

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16	NR				

EKCQ6X-5872 GlobalFiler™ (eDNA)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

EL8A8Y-5877 GlobalFiler™ Express

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

EVTDDD-5872 PowerPlex® 35GY (Popstats)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

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

EYTQUB-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NR			NR	

F9XX9B-5877 PowerPlex® Fusion6C (GeneMapper ID-X 1.5)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

FEJQKB-5872 GlobalFiler™ Express

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

FHP7ZU-5877 GlobalFiler™ (KInCALc)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	no results			no results	

FHZ9LR-5872 PowerPlex® Fusion

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

FJBB9Q-5872 PowerPlex® Fusion (Popstats)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

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

G2AP7W-5877 GlobalFiler™ Express

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	-	-	17,29.2	7,9.3	8,9
	14,16	-	-	-	-	

G6UFUF-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

GMRY69-5877 GlobalFiler™ Express

1	12,16.3	17,25	11,15	15	10,12	NT
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	NT	NT	17,29.2	7,9.3	8,9
	14,16	NR	NT	NT	NR	

HECFLA-5872 GlobalFiler™ Express (POPStats)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

HG4EZ8-5872 GlobalFiler™ Express

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NA			NA	

HHCT38-5872 PowerPlex® Fusion (Gen Analysen)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2		X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

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

JBCRH8-5872 PowerPlex® Fusion 6C

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

JCHAHN-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

JGZCPU-5877 PowerPlex® Fusion 6C (DBLR)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16	NR	NR	NR		

JVJYW7-5872 PowerPlex® 21

1	12,16.3	17,25		15,15	10,12	11,12
	12,12	10,14		18,18	11,12	12,13
	14,15	13,14	29,31.2		X,X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

KNT4BT-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

L4ZMK6-5877 GlobalFiler™ (Popstats)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

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

LCE87P-5877 GlobalFiler™ (POPSTATS)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

LCXADP-5872 GlobalFiler™ Express (DNAAview)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NM			NM	

LZZCN6-5877 GlobalFiler™ Express

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NR			NR	

M6BRR2-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

M9CQ9L-5872 PowerPlex® Fusion (Popstats)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

MGLELJ-5872 PowerPlex® Fusion

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

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

MK3GTP-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

MQ8KG3-5872 PowerPlex® 21

1	12,16.3	17,25		15,15	10,12	11,12
	12,12	10,14		18,18	11,12	12,13
	14,15	13,14	29,31.2		X,X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

MVK7L3-5872 PowerPlex® FUSION 6C (M-FISYS)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

MYJGG3-5872 PowerPlex® Fusion 6C (Excel Validated)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

N34FBJ-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	-				

N4DX83-5872 GlobalFiler™, ForenSeq Sig Prep

1	12,16.3	17,25	11,15	15,15	10,12	11,12
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16	NR	NR	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

NA47V3-5872 GlobalFiler™						
1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NA			NA	
NRJEW3-5872 GlobalFiler™						
1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					
P6NZTZ-5877 GlobalFiler™						
1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					
PUHDKZ-5872 GlobalFiler™						
1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					
PYXLBL-5877 GlobalFiler™ (Popstats)						
1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					
Q8QDVK-5872 PowerPlex® ESX, CS7, VeriFiler Plus						
1	12,16.3	17,25	11,15	15	10,12	11,12
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

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

Q93U9X-5872 PowerPlex® Fusion 6C

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16	-	-	-		

RCYYJG-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	No Results			No Results	

T6DKW3-5877 GlobalFiler™ Express

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

T76MGW-5872 PowerPlex® CS7, VeriFiler™ Express, Investigator® HDplex, SureID® 27comp

1	12,16.3	17,25	11,15	15,15	10,12	11,12
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

TEJ6GJ-5872 GlobalFiler™ Express (DNAView)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NM			NM	

TMDABK-5877 GlobalFiler™ Express

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

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

TZGZPX-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

U8QRNU-5872 VersaPlex 2 7PY

1	12,16.3	17,25	11,15	15	10,12	11,12
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16					

UBUHYF-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

ULB7RT-5872 GlobalFiler™ (DNA View)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	0			0	

UPBHNT-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

UX6LVW-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

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

VE9GNU-5872 PowerPlex® Fusion

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12		7,9.3	8,9
	14,16	NR				

VP93WE-5877 GlobalFiler™ (Popstats)

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

VYHDND-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	no result			no result	

W7B6AC-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	no results			no results	

WAAF6C-5877 GlobalFiler™

1	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	no results			no results	

WDUAZR-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	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

WDWZBG-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

WLND9V-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

WVCACG-5877 GlobalFiler™ Express

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

Y2RT8T-5872 GlobalFiler™

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16					

Y782XD-5872 GlobalFiler™ Express (DNA View)

1	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	NM			NM	

YMBV4D-5872 Identifiler® Direct

1		17,25		15,15	10,12	
	12,12	10,14			11,12	12,13
	14,15	13,14	29,31.2		X,X	11,12
	20,21				7,9.3	8,9
	14,16					

TABLE 1

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

Item 1 - STR Results

Z7ZGGN-5877 GlobalFiler™ (eDNA version 3.2.0.0 2017-03-13)

	12,16.3	17,25	11,15	15	10,12	Not Tested
	12	10,14	14,15	18	11,12	12,13
1	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	Not Tested	Not Tested	17,29.2	7,9.3	8,9
	14,16	No Results	Not Tested	Not Tested	No Results	

Z9Q6YB-5877 GlobalFiler™ (converge software)

	12,16.3	17,25	11,15	15,15	10,12	
	12,12	10,14	14,15	18,18	11,12	12,13
1	14,15	13,14	29,31.2	15,16	X,X	11,12
	20,21			17,29.2	7,9.3	8,9
	14,16	,			,	

Z9QHKQ-5872 PowerPlex® ESX17, PPHS16

	12,16.3	17,25	11,15	15	10,12	
	12	10,14	14,15	18	11,12	12,13
1	14,15	13,14	29,31.2	15,16	X	11,12
	20,21	11,14	10,12	17,29.2	7,9.3	8,9
	14,16					

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

26MY2N-5872 PowerPlex® Fusion (DNABView)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

2GGFQP-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

37DKA7-5877 Investigator® 24plex (POPSTATS)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11				

3ARHDM-5872 PowerPlex® 21

2	12,17.3	17,19		15,17	10,11	11,12
	11,12	10,12		18,20	11,12	8,12
	15,15	13,14	31.2,32.2		X,Y	11,12
	20,21	12,14	5,10		9.3,9.3	8,8
	14,16					

3C2ANN-5872 PowerPlex® Fusion (Familias v.3.2.8)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3,9.3	8,8
	14,16	11				

3LRVTM-5872 PowerPlex® Fusion

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

TABLE 1

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

Item 2 - STR Results

3NA8CP-5872 GlobalFiler™						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	
48HUE9-5872 GlobalFiler™						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	
6KKKUL-5872 GlobalFiler™						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	
77ZHP3-5872 GlobalFiler™						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	
79BAXH-5877 GlobalFiler™, VeriFiler Plus (eDNA)						
2	12,17.3	17,19	11,15	15,17	10,11	11,12
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11			2	
79JRT6-5872 GlobalFiler™ Express (DNAView)						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

TABLE 1

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

Item 2 - STR Results

7AM2U7-5872 PowerPlex® Fusion 6C (eDNA)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	12,14	5,10	29.2,29.2	9.3,9.3	8,8
	14,16	11	16	15		

7CQUMJ-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

7EBBY6-5877 Qiagen Investigator ESSplex SE QS (Familias 3.2.8)

2	12,17.3	17,19	11,15	15,17		
		10,12	15,15	18,20		8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	
	20,21			29.2,29.2	9.3,9.3	
	14,16					

7FP7MP-5872 GlobalFiler™ (DBLR V1.3.35)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

7GMQT7-5872 GlobalFiler™ (Genoproof 3.0.7)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

7K2W9K-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

TABLE 1

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

Item 2 - STR Results

7M8GX7-5872 PowerPlex® Fusion (KIn CALc 5.0.12)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	Inconclusive				

7NK9N2-5877 PowerPlex® Fusion 6C

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11	16	15		

7Q8TU6-5872 GlobalFiler™ Express (DNAnView)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

87E42P-5877 PowerPlex® Fusion 6C

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11	16	15		

8D2WB4-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

8UZ9J6-5877 GlobalFiler™ (4D SDNADB v18)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

TABLE 1

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

Item 2 - STR Results

9HP47G-5872 PowerPlex® 21 (Kinship)

2	12,17.3	17,19		15,17	10,11	11,12
	11,12	10,12		18,20	11,12	8,12
	15,15	13,14	31.2,32.2		X,Y	11,12
	20,21	12,14	5,10		9.3,9.3	8,8
	14,16					

9ZLNM2-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

ARBL22-5872 GlobalFiler™ Express (DNAnView)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

BB2Y8D-5872 PowerPlex®

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	12,14	5,10	29.2,29.2	9.3,9.3	8,8
	14,16	11	16	15		

BFAMKE-5877 PowerPlex® 5C

2	12,17.3	17,19	11,15	15,17	10,11	--
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	--	9.3	8
	14,16	11	--	--	--	

BWU2L-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

TABLE 1

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

Item 2 - STR Results

C68HBD-5877 Verifier Express (GeneMapper ID-X V1.6)

2	12,17.3	17,19	11,15	15,17	10,11	11,12
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16				2	

C8D3YD-5872 GlobalFiler™ Express (PopStats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

CDHLGC-5877 PowerPlex® Fusion 6C

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11	16	15		

CVHUHW-5872 PowerPlex® Fusion (PopStats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

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

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11	16	15	2	

D7VFXB-5877 PowerPlex® 16HS, ESX17Fast (CODIS/Popstats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16					

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

DHTC2X-5872 PowerPlex® FUSION 5C, 21, GlobalFiler™ (Familias)

2	12,17.3	17,19	11,15	15,17	10,11	11,12
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	12,14	5,10	29.2,29.2	9.3,9.3	8,8
	14,16	11	16	15	2	

DYD32W-5877 GlobalFiler™ (PopStats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

E94TFC-5872 PowerPlex® Fusion

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

EKCQ6X-5872 GlobalFiler™ (eDNA)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

EL8A8Y-5877 GlobalFiler™ Express

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

EVTDDD-5872 PowerPlex® 35GY (Popstats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16					

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

EYTQUB-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

F9XX9B-5877 PowerPlex® Fusion6C (GeneMapper ID-X 1.5)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	12,14	5,10	29.2,29.2	9.3,9.3	8,8
	14,16	11	16	15		

FEJQKB-5872 GlobalFiler™ Express

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

FHP7ZU-5877 GlobalFiler™ (KInCALc)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

FHZ9LR-5872 PowerPlex® Fusion

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

FJBB9Q-5872 PowerPlex® Fusion (Popstats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

TABLE 1

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

Item 2 - STR Results

G2AP7W-5877 GlobalFiler™ Express

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	-	-	29.2,29.2	9.3,9.3	8,8
	14,16	11	-	-	2	

G6UFUF-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

GMRY69-5877 GlobalFiler™ Express

2	12,17.3	17,19	11,15	15,17	10,11	NT
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	NT	NT	29.2	9.3	8
	14,16	11	NT	NT	2	

HECFLA-5872 GlobalFiler™ Express (POPStats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

HG4EZ8-5872 GlobalFiler™ EXPRESS (GFF)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

HHCT38-5872 PowerPlex® Fusion (Gen Analysen)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2		X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

TABLE 1

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

Item 2 - STR Results

JBCRH8-5872 PowerPlex® Fusion 6C

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11	16	15		

JCHAHN-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

JGZCPU-5877 PowerPlex® Fusion 6C (DBLR)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11	16	15		

JVJYW7-5872 PowerPlex® 21

2	12,17.3	17,19		15,17	10,11	11,12
	11,12	10,12		18,20	11,12	8,12
	15,15	13,14	31.2,32.2		X,Y	11,12
	20,21	12,14	5,10		9.3,9.3	8,8
	14,16					

KNT4BT-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

L4ZMK6-5877 GlobalFiler™ (Popstats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

TABLE 1

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

Item 2 - STR Results

LCE87P-5877 GlobalFiler™ (POPSTATS)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

LCXADP-5872 GlobalFiler™ Express (DNAAview)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

LZZCN6-5877 GlobalFiler™ Express

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

M6BRR2-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

M9CQ9L-5872 PowerPlex® Fusion (Popstats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

MGLELJ-5872 PowerPlex® Fusion

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

TABLE 1

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

Item 2 - STR Results

MK3GTP-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

MQ8KG3-5872 PowerPlex® 21

2	12,17.3	17,19		15,17	10,11	11,12
	11,12	10,12		18,20	11,12	8,12
	15,15	13,14	31.2,32.2		X,Y	11,12
	20,21	12,14	5,10		9.3,9.3	8,8
	14,16					

MVK7L3-5872 PowerPlex® FUSION 6C (M-FISYS)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	12,14	5,10	29.2,29.2	9.3,9.3	8,8
	14,16	11	16	15		

MYJGG3-5872 PowerPlex® Fusion 6C (Excel Validated)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11	16	15		

N34FBJ-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11				

N4DX83-5872 GlobalFiler™, ForenSeq Sig Prep

2	12,17.3	17,19	11,15	15,17	10,11	11,12
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	12,14	5,10	29.2,29.2	9.3,9.3	8,8
	14,16	11	16	15	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

NA47V3-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

NRJEW3-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

P6NZTZ-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

PUHDKZ-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

PYXLBL-5877 GlobalFiler™ (Popstats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

Q8QDVK-5872 PowerPlex® ESX, CS7, VeriFiler Plus

2	12,17.3	17,19	11,15	15,17	10,11	11,12
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11	16	15	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

Q93U9X-5872 PowerPlex® Fusion 6C

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	12,14	5,10	29.2,29.2	9.3,9.3	8,8
	14,16	11	16	15		

RCYYJG-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

T6DKW3-5877 GlobalFiler™ Express

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

T76MGW-5872 PowerPlex® CS7, VeriFiler™ Express, Investigator® HDplex, SureID® 27comp

2	12,17.3	17,19	11,15	15,17	10,11	11,12
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21	12,14	5,10	29.2,29.2	9.3,9.3	8,8
	14,16				2	

TEJ6GJ-5872 GlobalFiler™ Express (DNAView)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

TMDABK-5877 GlobalFiler™ Express

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

TABLE 1

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

Item 2 - STR Results

TZGZPX-5872 GlobalFiler™						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	
U8QRNU-5872 VersaPlex 2 7PY						
2	12,17.3	17,19	11,15	15,17	10,11	11,12
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11	16	15		
UBUHYF-5872 GlobalFiler™						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	
ULB7RT-5872 GlobalFiler™ (DNA View)						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	
UPBHNT-5872 GlobalFiler™						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	
UX6LVW-5872 GlobalFiler™						
2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

TABLE 1

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

Item 2 - STR Results

VE9GNU-5872 PowerPlex® Fusion

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10		9.3	8
	14,16	11				

VP93WE-5877 GlobalFiler™ (Popstats)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

VYHDND-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

W7B6AC-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

WAAF6C-5877 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11			2	

WDUAZR-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

TABLE 1

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

Item 2 - STR Results

WDWZBG-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

WLND9V-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

WVCACG-5877 GlobalFiler™ Express

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

Y2RT8T-5872 GlobalFiler™

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

Y782XD-5872 GlobalFiler™ Express (DNA View)

2	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21			29.2	9.3	8
	14,16	11			2	

YMBV4D-5872 Identifiler® Direct

2		17,19		15,17	10,11	
		11,12	10,12		11,12	8,12
		15,15	13,14	31.2,32.2	X,Y	11,12
		20,21			9.3,9.3	8,8
		14,16				

TABLE 1

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

Item 2 - STR Results

Z7ZGGN-5877 GlobalFiler™ (eDNA version 3.2.0.0 2017-03-13)

	12,17.3	17,19	11,15	15,17	10,11	Not Tested
	11,12	10,12	15	18,20	11,12	8,12
2	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	Not Tested	Not Tested	29.2	9.3	8
	14,16	11	Not Tested	Not Tested	2	

Z9Q6YB-5877 GlobalFiler™ (converge software)

	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15,15	18,20	11,12	8,12
2	15,15	13,14	31.2,32.2	15,15	X,Y	11,12
	20,21			29.2,29.2	9.3,9.3	8,8
	14,16	11,			2,	

Z9QHKQ-5872 PowerPlex® ESX17,PPHS16

	12,17.3	17,19	11,15	15,17	10,11	
	11,12	10,12	15	18,20	11,12	8,12
2	15	13,14	31.2,32.2	15	X,Y	11,12
	20,21	12,14	5,10	29.2	9.3	8
	14,16	11				

TABLE 1

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

Item 3 - STR Results

26MY2N-5872 PowerPlex® Fusion (DNAView)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				

2GGFQP-5872 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

37DKA7-5877 Investigator® 24plex (POPSTATS)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11				

3ARHDM-5872 PowerPlex® 21

3	12,17.3	17,19		16,17	11,12	12,12
	11,11	14,14		19,23	11,11	12,14
	12,18	14,14	28,28		X,Y	10,12
	21,21	11,13	7,7		8,9	8,11
	14,17					

3C2ANN-5872 PowerPlex® Fusion (Familias v.3.2.8)

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7		8,9	8,11
	14,17	11				

3LRVTM-5872 PowerPlex® Fusion

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				

TABLE 1

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

Item 3 - STR Results

3NA8CP-5872 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

48HUE9-5872 GlobalFiler™ (eDNA Brutus)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

6KKKUL-5872 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

77ZHP3-5872 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

79BAXH-5877 GlobalFiler™, VeriFiler Plus (eDNA)

3	12,17.3	17,19	10	16,17	11,12	12
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17	11			2	

79RJT6-5872 GlobalFiler™ Express (DNAView)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

TABLE 1

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

Item 3 - STR Results

7AM2U7-5872 PowerPlex® Fusion 6C (eDNA)

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7	16,29.2	8,9	8,11
	14,17	11	19	16		

7CQUMJ-5872 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

7EBBY6-5877 Qiagen Investigator ESSplex SE QS (Familias 3.2.8)

3	12,17.3	17,19	10,10	16,17		
		14,14	13,16	19,23		12,14
	12,18	14,14	28,28	12,15	X,Y	
	21,21			16,29.2	8,9	
	14,17					

7FP7MP-5872 GlobalFiler™ (DBLR V1.3.35)

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

7GMQT7-5872 GlobalFiler™ (Genoproof 3.0.7)

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

7K2W9K-5872 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

TABLE 1

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

Item 3 - STR Results

7M8GX7-5872 PowerPlex® Fusion (KIn CALc 5.0.12)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	Inconclusive				

7NK9N2-5877 PowerPlex® Fusion 6C

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17	11	19	16		

7Q8TU6-5872 GlobalFiler™ Express (DNAnView)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

87E42P-5877 PowerPlex® Fusion 6C

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17	11	19	16		

8D2WB4-5877 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

8UZ9J6-5877 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

TABLE 1

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

Item 3 - STR Results

9HP47G-5872 PowerPlex® 21 (Kinship)

3	12,17.3	17,19		16,17	11,12	12,12
	11,11	14,14		19,23	11,11	12,14
	12,18	14,14	28,28		X,Y	10,12
	21,21	11,13	7,7		8,9	8,11
	14,17					

9ZLNM2-5877 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

ARBL22-5872 GlobalFiler™ Express (DNAAview)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

BB2Y8D-5872 PowerPlex®

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7	16,29.2	8,9	8,11
	14,17	11	19	16		

BFAMKE-5877 PowerPlex® 5C (eDNA)

3	12,17.3	17,19	10	16,17	11,12	--
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	--	8,9	8,11
	14,17	11	--	--	--	

BW XU2L-5877 GlobalFiler™ (FBI Popstats Population Database)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

TABLE 1

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

Item 3 - STR Results

C68HBD-5877 Verifier Express (GeneMapper ID-X V1.6)

3	12,17.3	17,19	10	16,17	11,12	12
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17				2	

C8D3YD-5872 GlobalFiler™ Express

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

CDHLGC-5877 PowerPlex® Fusion 6C

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17	11	19	16		

CVHUHW-5872 PowerPlex® Fusion

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				

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

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17	11	19	16	2	

D7VFXB-5877 PowerPlex® 16HS, ESX17Fast (CODIS/Popstats)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17					

TABLE 1

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

Item 3 - STR Results

DHTC2X-5872 PowerPlex® FUSION 5C, 21, GlobalFiler™ (Familias)

3	12,17.3	17,19	10,10	16,17	11,12	12,12
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7	16,29.2	8,9	8,11
	14,17	11	19	16	2	

DYD32W-5877 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

E94TFC-5872 PowerPlex® Fusion

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				

EKCQ6X-5872 GlobalFiler™ (eDNA)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	10	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

EL8A8Y-5877 GlobalFiler™ Express

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

EVTDDD-5872 PowerPlex® 35GY

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17					

TABLE 1

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

Item 3 - STR Results

EYTQUB-5872 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

F9XX9B-5877 PowerPlex® Fusion6C (GeneMapper ID-X 1.5)

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7	16,29.2	8,9	8,11
	14,17	11	19	16		

FEJQKB-5872 GlobalFiler™ Express

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

FHP7ZU-5877 GlobalFiler™ (KInCALc)

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

FHZ9LR-5872 PowerPlex® Fusion

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				

FJBB9Q-5872 PowerPlex® Fusion

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				

TABLE 1

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

Item 3 - STR Results

G2AP7W-5877 GlobalFiler™ Express

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	-	-	16,29.2	8,9	8,11
	14,17	11	-	-	2	

G6UFUF-5872 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

GMRY69-5877 GlobalFiler™ Express

3	12,17.3	17,19	10	16,17	11,12	NT
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	NT	NT	16,29.2	8,9	8,11
	14,17	11	NT	NT	2	

HECFLA-5872 GlobalFiler™ Express

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

HG4EZ8-5872 GlobalFiler™ EXPRESS (GFF)

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

HHCT38-5872 PowerPlex® Fusion (Gen Analysen)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28		X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				

TABLE 1

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

Item 3 - STR Results

JBCRH8-5872 PowerPlex® Fusion 6C

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17	11	19	16		

JCHAHN-5872 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

JGZCPU-5877 PowerPlex® Fusion 6C (DBLR)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17	11	19	16		

JVJYW7-5872 PowerPlex® 21 (Kinship (Paternity Trio Module))

3	12,17.3	17,19		16,17	11,12	12,12
	11,11	14,14		19,23	11,11	12,14
	12,18	14,14	28,28		X,Y	10,12
	21,21	11,13	7,7		8,9	8,11
	14,17					

KNT4BT-5872 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

L4ZMK6-5877 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

TABLE 1

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

Item 3 - STR Results

LCE87P-5877 GlobalFiler™						
3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	
LCXADP-5872 GlobalFiler™ Express (DNAmview)						
3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	
LZZCN6-5877 GlobalFiler™ Express						
3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	
M6BRR2-5877 GlobalFiler™						
3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	
M9CQ9L-5872 PowerPlex® Fusion						
3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				
MGLELJ-5872 PowerPlex® Fusion						
3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				

TABLE 1

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

Item 3 - STR Results

MK3GTP-5877 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

MQ8KG3-5872 PowerPlex® 21 (Kinship (Caucasian))

3	12,17.3	17,19		16,17	11,12	12,12
	11,11	14,14		19,23	11,11	12,14
	12,18	14,14	28,28		X,Y	10,12
	21,21	11,13	7,7		8,9	8,11
	14,17					

MVK7L3-5872 PowerPlex® FUSION 6C

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7	16,29.2	8,9	8,11
	14,17	11	19	16		

MYJGG3-5872 PowerPlex® Fusion 6C

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17	11	19	16		

N34FBJ-5877 GlobalFiler™

3	12,17.3	17,19	11,12	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	11,12	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11				

N4DX83-5872 GlobalFiler™, ForenSeq Sig Prep

3	12,17.3	17,19	10,10	16,17	11,12	12,12
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7	16,29.2	8,9	8,11
	14,17	11	19	16	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

NA47V3-5872 GlobalFiler™						
3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	
NRJEW3-5872 GlobalFiler™						
3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	
P6NZTZ-5877 GlobalFiler™						
3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	10,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	
PUHDKZ-5872 GlobalFiler™						
3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	
PYXLBL-5877 GlobalFiler™						
3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	
Q8QDVK-5872 PowerPlex® ESX, CS7, VeriFiler Plus (Familias v 3.3)						
3	12,17.3	17,19	10	16,17	11,12	12
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17				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

Q93U9X-5872 PowerPlex® Fusion 6C

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7	16,29.2	8,9	8,11
	14,17	11	19	16		

RCYYJG-5877 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

T6DKW3-5877 GlobalFiler™ Express

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

T76MGW-5872 PowerPlex® CS7, VeriFiler™ Express, Investigator® HDplex, SureID® 27comp

3	12,17.3	17,19	10,10	16,17	11,12	12,12
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21	11,13	7,7	16,29.2	8,9	8,11
	14,17				2	

TEJ6GJ-5872 GlobalFiler™ Express (DNAView)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

TMDABK-5877 GlobalFiler™ Express

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

TABLE 1

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

Item 3 - STR Results

TZGZPX-5872 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

U8QRNU-5872 VersaPlex 2 7PY (Familias 3.2.8)

3	12,17.3	17,19	10	16,17	11,12	12
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11	19	16		

UBUHYF-5872 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

ULB7RT-5872 GlobalFiler™ (DNA View)

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

UPBHNT-5872 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

UX6LVW-5872 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

TABLE 1

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

Item 3 - STR Results

VE9GNU-5872 PowerPlex® Fusion

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7		8,9	8,11
	14,17	11				

VP93WE-5877 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

VYHDND-5877 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

W7B6AC-5877 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

WAAF6C-5877 GlobalFiler™

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11			2	

WDUAZR-5872 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

TABLE 1

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

Item 3 - STR Results

WDWZBG-5872 GlobalFiler™ (eDNA Relatedness)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

WLND9V-5872 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

WVCACG-5877 GlobalFiler™ Express

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

Y2RT8T-5872 GlobalFiler™

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

Y782XD-5872 GlobalFiler™ Express (DNA View)

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21			16,29.2	8,9	8,11
	14,17	11			2	

YMBV4D-5872 Identifiler® Direct

3		17,19		16,17	11,12	
	11,11	14,14			11,11	12,14
	12,18	14,14	28,28		X,Y	10,12
	21,21				8,9	8,11
	14,17					

TABLE 1

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

Item 3 - STR Results

Z7ZGGN-5877 GlobalFiler™ (eDNA version 3.2.0.0 2017-03-13)

3	12,17.3	17,19	10	16,17	11,12	Not Tested
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	Not Tested	Not Tested	16,29.2	8,9	8,11
	14,17	11	Not Tested	Not Tested	2	

Z9Q6YB-5877 GlobalFiler™ (converge software)

3	12,17.3	17,19	10,10	16,17	11,12	
	11,11	14,14	13,16	19,23	11,11	12,14
	12,18	14,14	28,28	12,15	X,Y	10,12
	21,21			16,29.2	8,9	8,11
	14,17	11,			2,	

Z9QHKQ-5872 PowerPlex® ESX17, PPHS16

3	12,17.3	17,19	10	16,17	11,12	
	11	14	13,16	19,23	11	12,14
	12,18	14	28	12,15	X,Y	10,12
	21	11,13	7	16,29.2	8,9	8,11
	14,17	11				

TABLE 1

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

Item 4 - STR Results

26MY2N-5872 PowerPlex® Fusion (DNAView)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

2GGFQP-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

37DKA7-5877 Investigator® 24plex (POPSTATS)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11				

3ARHDM-5872 PowerPlex® 21

4	15,3,17,3	19,21		15,17	11,14	11,11
	10,11	12,12		17,3,20	11,11	8,12
	15,19	13,13	30,32.2		X,Y	11,11
	20,21	12,12	5,11		9,3,9,3	8,11
	16,19					

3C2ANN-5872 PowerPlex® Fusion (Familias v.3.2.8)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11		9,3,9,3	8,11
	16,19	11				

3LRVTM-5872 PowerPlex® Fusion

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

TABLE 1

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

Item 4 - STR Results

3NA8CP-5872 GlobalFiler™						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	
48HUE9-5872 GlobalFiler™ (eDNA Brutus)						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	
6KKKUL-5872 GlobalFiler™						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	
77ZHP3-5872 GlobalFiler™						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	
79BAXH-5877 GlobalFiler™, VeriFiler Plus (eDNA)						
4	15,3,17,3	19,21	10,15	15,17	11,14	11
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19	11			2	
79RJT6-5872 GlobalFiler™ Express (DNAView)						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

TABLE 1

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

Item 4 - STR Results

7AM2U7-5872 PowerPlex® Fusion 6C (eDNA)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11	20,29.2	9,3,9,3	8,11
	16,19	11	16	15		

7CQUMJ-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

7EBBY6-5877 Qiagen Investigator ESSplex SE QS (Familias 3.2.8)

4	15,3,17,3	19,21	10,15	15,17		
		12,12	13,15	17,3,20		8,12
	15,19	13,13	30,32.2	15,16	X,Y	
	20,21			20,29.2	9,3,9,3	
	16,19					

7FP7MP-5872 GlobalFiler™ (DBLR V1.3.35)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

7GMQT7-5872 GlobalFiler™ (Genoproof 3.0.7)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

7K2W9K-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

TABLE 1

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

Item 4 - STR Results

7M8GX7-5872 PowerPlex® Fusion (KIn CALc 5.0.12)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	Inconclusive				

7NK9N2-5877 PowerPlex® Fusion 6C

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19	11	16	15		

7Q8TU6-5872 GlobalFiler™ Express (DNABView)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

87E42P-5877 PowerPlex® Fusion 6C (Kin Calc 5.0.12)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19	11	16	15		

8D2WB4-5877 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

8UZ9J6-5877 GlobalFiler™ (4D SDNADB v18)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

TABLE 1

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

Item 4 - STR Results

9HP47G-5872 PowerPlex® 21 (Kinship)

4	15,3,17,3	19,21		15,17	11,14	11,11
	10,11	12,12		17,3,20	11,11	8,12
	15,19	13,13	30,32.2		X,Y	11,11
	20,21	12,12	5,11		9,3,9.3	8,11
	16,19					

9ZLNM2-5877 GlobalFiler™ (FBI Popstats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

ARBL22-5872 GlobalFiler™ Express (DNAnview)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

BB2Y8D-5872 PowerPlex®

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11	20,29.2	9,3,9.3	8,11
	16,19	11	16	15		

BFAMKE-5877 PowerPlex® 5C (eDNA)

4	15,3,17,3	19,21	10,15	15,17	11,14	--
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	--	9,3	8,11
	16,19	11	--	--	--	

BW XU2L-5877 GlobalFiler™ (FBI Popstats Population Database)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

TABLE 1

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

Item 4 - STR Results

C68HBD-5877 Verifier Express (GeneMapper ID-X V1.6)

4	15,3,17,3	19,21	10,15	15,17	11,14	11
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19				2	

C8D3YD-5872 GlobalFiler™ Express (PopStats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

CDHLGC-5877 PowerPlex® Fusion 6C (Kln Calc 5.0.12)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19	11	16	15		

CVHUHW-5872 PowerPlex® Fusion (PopStats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

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

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19	11	16	15	2	

D7VFXB-5877 PowerPlex® 16HS, ESX17Fast (CODIS/Popstats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19					

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 4 - STR Results

DHTC2X-5872 PowerPlex® FUSION 5C, 21, GlobalFiler™ (Familias)

4	15,3,17,3	19,21	10,15	15,17	11,14	11,11
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11	20,29.2	9,3,9,3	8,11
	16,19	11	16	15	2	

DYD32W-5877 GlobalFiler™ (PopStats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

E94TFC-5872 PowerPlex® Fusion

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

EKCQ6X-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

EL8A8Y-5877 GlobalFiler™ Express

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

EVTDDD-5872 PowerPlex® 35GY (Popstats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19					

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 4 - STR Results

EYTQUB-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

F9XX9B-5877 PowerPlex® Fusion6C (GeneMapper ID-X 1.5)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11	20,29.2	9,3,9,3	8,11
	16,19	11	16	15		

FEJQKB-5872 GlobalFiler™ Express

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

FHP7ZU-5877 GlobalFiler™ (KInCALc)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

FHZ9LR-5872 PowerPlex® Fusion

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

FJBB9Q-5872 PowerPlex® Fusion (PopStats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

TABLE 1

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

Item 4 - STR Results

G2AP7W-5877 GlobalFiler™ Express

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	-	-	20,29.2	9,3,9,3	8,11
	16,19	11	-	-	2	

G6UFUF-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

GMRY69-5877 GlobalFiler™ Express

4	15,3,17,3	19,21	10,15	15,17	11,14	NT
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	NT	NT	20,29.2	9,3	8,11
	16,19	11	NT	NT	2	

HECFLA-5872 GlobalFiler™ Express (POPStats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

HG4EZ8-5872 GlobalFiler™ EXPRESS (GFF)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

HHCT38-5872 PowerPlex® Fusion (Gen Analysen)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2		X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

TABLE 1

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

Item 4 - STR Results

JBCRH8-5872 PowerPlex® Fusion 6C

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19	11	16	15		

JCHAHN-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

JGZCPU-5877 PowerPlex® Fusion 6C (DBLR)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19	11	16	15		

JVJYW7-5872 PowerPlex® 21 (Kinship (Paternity Trio Module))

4	15,3,17,3	19,21		15,17	11,14	11,11
	10,11	12,12		17,3,20	11,11	8,12
	15,19	13,13	30,32.2		X,Y	11,11
	20,21	12,12	5,11		9,3,9,3	8,11
	16,19					

KNT4BT-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

L4ZMK6-5877 GlobalFiler™ (Popstats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

TABLE 1

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

Item 4 - STR Results

LCE87P-5877 GlobalFiler™ (POPSTATS)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

LCXADP-5872 GlobalFiler™ Express (DNAAview)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

LZZCN6-5877 GlobalFiler™ Express

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

M6BRR2-5877 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

M9CQ9L-5872 PowerPlex® Fusion (Popstats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

MGLELJ-5872 PowerPlex® Fusion

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

TABLE 1

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

Item 4 - STR Results

MK3GTP-5877 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

MQ8KG3-5872 PowerPlex® 21 (Kinship (Caucasian))

4	15,3,17,3	19,21		15,17	11,14	11,11
	10,11	12,12		17,3,20	11,11	8,12
	15,19	13,13	30,32.2		X,Y	11,11
	20,21	12,12	5,11		9,3,9,3	8,11
	16,19					

MVK7L3-5872

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11	20,29.2	9,3,9,3	8,11
	16,19	11	16	15		

MYJGG3-5872 PowerPlex® Fusion 6C (Excel Validated)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19	11	16	15		

N34FBJ-5877 GlobalFiler™

4	15,3,17,3	19,21	10,11	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11				

N4DX83-5872 GlobalFiler™, ForenSeq Sig Prep

4	15,3,17,3	19,21	10,15	15,17	11,14	11,11
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11	20,29.2	9,3,9,3	8,11
	16,19	11	16	15	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

NA47V3-5872 GlobalFiler™						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	
NRJEW3-5872 GlobalFiler™						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	
P6NZTZ-5877 GlobalFiler™						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	
PUHDKZ-5872 GlobalFiler™						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	
PYXLBL-5877 GlobalFiler™ (Popstats)						
4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	
Q8QDVK-5872 PowerPlex® ESX, CS7, VeriFiler Plus (Familias v 3.3)						
4	15,3,17,3	19,21	10,15	15,17	11,14	11
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9,3	8,11
	16,19	11	16	15	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

Q93U9X-5872 PowerPlex® Fusion 6C

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11	20,29.2	9,3,9,3	8,11
	16,19	11	16	15		

RCYYJG-5877 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

T6DKW3-5877 GlobalFiler™ Express

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

T76MGW-5872 PowerPlex® CS7, VeriFiler™ Express, Investigator® HDplex, SureID® 27comp

4	15,3,17,3	19,21	10,15	15,17	11,14	11,11
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21	12,12	5,11	20,29.2	9,3,9,3	8,11
	16,19				2	

TEJ6GJ-5872 GlobalFiler™ Express (DNAView)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

TMDABK-5877 GlobalFiler™ Express

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

TABLE 1

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

Item 4 - STR Results

TZGZPX-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

U8QRNU-5872 VersaPlex 2 7PY (Familias 3.2.8)

4	15,3,17,3	19,21	10,15	15,17	11,14	11
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11	16	15		

UBUHYF-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

ULB7RT-5872 GlobalFiler™ (DNA View)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

UPBHNT-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

UX6LVW-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

TABLE 1

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

Item 4 - STR Results

VE9GNU-5872 PowerPlex® Fusion

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11		9,3	8,11
	16,19	11				

VP93WE-5877 GlobalFiler™ (Popstats)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

VYHDND-5877 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

W7B6AC-5877 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

WAAF6C-5877 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9,3,9,3	8,11
	16,19	11			2	

WDUAZR-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

TABLE 1

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

Item 4 - STR Results

WDWZBG-5872 GlobalFiler™ (eDNA Relatedness)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

WLND9V-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

WVCACG-5877 GlobalFiler™ Express

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	20,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

Y2RT8T-5872 GlobalFiler™

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

Y782XD-5872 GlobalFiler™ Express (DNA View)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21			20,29.2	9,3	8,11
	16,19	11			2	

YMBV4D-5872 Identifiler® Direct

4		19,21		15,17	11,14	
		10,11	12,12		11,11	8,12
		15,19	13,13	30,32.2	X,Y	11,11
		20,21			9,3,9,3	8,11
		16,19				

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 4 - STR Results

Z7ZGGN-5877 GlobalFiler™ (eDNA version 3.2.0.0 2017-03-13)

4	15,3,17,3	19,21	10,15	15,17	11,14	Not Tested
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	Not Tested	Not Tested	20,29.2	9.3	8,11
	16,19	11	Not Tested	Not Tested	2	

Z9Q6YB-5877 GlobalFiler™ (converge software)

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12,12	13,15	17,3,20	11,11	8,12
	15,19	13,13	30,32.2	15,16	X,Y	11,11
	20,21			20,29.2	9.3,9.3	8,11
	16,19	11,			2,	

Z9QHKQ-5872 PowerPlex® ESX17, PPHS16

4	15,3,17,3	19,21	10,15	15,17	11,14	
	10,11	12	13,15	17,3,20	11	8,12
	15,19	13	30,32.2	15,16	X,Y	11
	20,21	12	5,11	20,29.2	9.3	8,11
	16,19	11				

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

26MY2N-5872 NIST Promega

	3.760	4.149	0.000	2.375	1.405	
	4.878	0.000	0.000	0.000	1.683	0.000
3PI	0.000	1.622	0.000	1.556		0.747
	3.312	0.000	0.000		0.000	0.953
	1.703					

2GGFQP-5872 FBI PopStats, NIST 2017

	3.75	4.14		2.37	1.40	
	4.87				1.68	
3PI		1.62		1.55		0.74
	3.31			N/A		0.95
	N/A					

3ARHDM-5872 NIST-STRBASE

	3.7594	4.1494		2.3753	1.4045	1.8755
	4.8780	0		0	1.6829	0
3PI	0	1.6226	0			0.7474
	3.3113	0	0		0	0.9526
	1.7030					

3C2ANN-5872 [Location Identifying Database]

	50.15004995	12.8067909	4.669519613	12.6060138	3.972465211	
	10.05795918	19.08812284	26.33332263	60.83794778	35.36001276	176.8551678
3PI	75.67529851	17.47170043	128.8740961	192.3076923		5.23694826
	128.5704012	25.33504849	341.9074931		192.6040062	3.975058084
	31.9284802					

48HUE9-5872 NIST-STRBASE

	3.7594	4.1494	0	2.3753	1.4045	
	4.8780	0	0	0	1.6829	0
3PI	0	1.6226	0	1.5562		0.7474
	3.3113			9.0253	0	0.9526
	1.7030					

6KKKUL-5872 FBI PopStats, NIST

	3.75	4.14	0	2.37	1.40	
	4.87	0	0	0	1.68	0
3PI	0	1.62	0	1.55		0.74
	3.31			N/A	0	0.95
	N/A					

79BAXH-5877 NIST-STRBASE

	3.7594	4.1494	0.0000	2.3753	1.4045	1.8801
	4.8780	0.0000	0.0000	0.0000	1.6829	0.0000
3PI	0.0000	1.6226	0.0000	1.5562		0.7474
	3.3113	0.0000	0.0000	9.0253	0.0000	0.9526
	1.7030					

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

79RJT6-5872 NIST-STRBASE						
	3.7593	4.1493	0.0028	2.3752	1.4044	
	4.8780	0.0040	0.0028	0.0028	1.6829	0.0040
3PI	0.0030	1.6225	0.0010	1.5561		0.7473
	3.3112			9.0252	0.0000	0.9525
	1.7029					
7AM2U7-5872 FBI PopStats, NIST-STRBASE, eDNA						
	3.7594	3.4554	0.0000	2.3764	1.2186	
	4.9261	0.0000	0.0000	0.0000	1.5936	0.0000
3PI	0.0000	1.6173	0.0000	1.5562		0.7985
	3.1358	0.0000	0.0000	9.0253	0.0000	0.9141
	1.6474					
7CQUMJ-5872 [Location Identifying Database]						
	4.21	4.0	0.0	2.61	1.39	
	4.51	0.0	0.0	0.0	1.72	0.0
3PI	0.0	1.66	0.0	1.25		0.81
	3.17			6.21	0.0	0.94
	1.49					
7EBBY6-5877 local, national database						
	4.4341	4.9614	0	2.5024		
		0	0	0		0
3PI	0	1.6962	0	1.2919		
	3.3138			8.2964	0	
	1.4627					
7FP7MP-5872 NIST-STRBASE						
	3.76332E+00	4.15176E+00	0.00000E+00	2.37687E+00	1.40612E+00	
	4.88214E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.68453E+00	0.00000E+00
3PI	0.00000E+00	1.62429E+00	0.00000E+00	1.55752E+00		7.48103E-01
	3.31461E+00			9.03199E+00	0.00000E+00	9.53574E-01
	1.70385E+00					
7GMQT7-5872 [Location Identifying Database]						
	3.5262	4.2880	0.0001	2.3104	1.4196	
	5.1970	0.0009	0.0012	0.0020	1.6936	0.0001
3PI	0.0001	1.7251	0.0001	1.5368		0.7808
	3.3211			6.9235	0.0001	0.9233
	1.6409					
7M8GX7-5872 NIST-STRBASE						
	3.76	4.14	0	2.37	1.40	
	4.87	0	0	0	1.68	0
3PI	0	1.62	0	1.55		0.747
	3.31	0	0		0	0.95
	1.70					

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

7Q8TU6-5872 NIST-STRBASE

	3.7593	4.1493	0.0028	2.3752	1.4044	
	4.8780	0.0040	0.0028	0.0028	1.6829	0.0040
3PI	0.0030	1.6225	0.0010	1.5561		0.7473
	3.3112			9.0252	0.0000	0.9525
	1.7029					

8D2WB4-5877 NIST-STRBASE

	3.64	3.98	0	2.36	1.42	
	4.62	0	0	0	1.64	0
3PI	0	1.59	0	1.52		0.744
	3.04			6.88	0	0.955
	1.61					

9HP47G-5872 NIST-STRBASE

	3.7594	4.1494		2.3753	1.4045	1.8755
	4.8780	0		0	1.6829	0
3PI	0	1.6226	0			0.7474
	3.3113	0	0		0	0.9526
	1.7030					

ARBL22-5872 NIST-STRBASE

	3.7593	4.1493	0.0028	2.3752	1.4044	
	4.8780	0.0040	0.0028	0.0028	1.6829	0.0040
3PI	0.0030	1.6225	0.0010	1.5561		0.7473
	3.3112			9.0252	0.0000	0.9525
	1.7029					

BFAMKE-5877 NIST-STRBASE

	3.7594	4.1494	--	2.3753	1.4045	--
	4.8780	--	--	--	1.6829	--
3PI	--	1.6226	--	1.5562		0.7474
	3.3113	--	--	--	--	0.9526
	1.7030					

BW XU2L-5877 FBI PopStats

	3.7594	4.1494		2.3753	1.4045	
	4.878				1.6829	
3PI		1.6226		1.5562		0.74738
	3.3113			9.0253		0.95256
	1.7030					

C68HBD-5877 NIST-STRBASE

	3.76	4.01	0.00	2.38	1.40	0.47
	3.14	0.00	1.27	0.00	0.84	0.00
3PI	1.47	0.41	0.00	0.78		0.37
	0.83	0.00	0.00		0.73	0.95
	0.85					

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

CXLKRC-5872	Local Database					
	3.18	4.73		2.08	1.49	
	5.10				1.66	
	3PI	1.74		1.34		0.85
	3.33			15.87		0.91
	1.71					
D7VFXB-5877	[Location Identifying Database]					
	3.1250	3.7936	0	2.2758	1.5361	
	4.8309	0	0	0	1.6658	0
	3PI	0	0	1.4184		0.83084
	3.0656	0	0	10.526	0	0.91025
	1.7367					
EKCCQ6X-5872	NIST-STRBASE					
	3.7594	4.1494	0	2.3753	1.4045	
	4.8780	0	0	0	1.6829	0
	3PI	0	0	1.5562		0.7474
	3.3113			9.0253	0	0.9526
	1.7030					
FHP7ZU-5877	NIST-STRBASE					
	3.64	3.98	0	2.36	1.42	
	4.62	0	0	0	1.64	0
	3PI	0	0	1.52		0.744
	3.04			6.88	0	0.955
	1.61					
G6UFUF-5872	NIST-STRBASE					
	3.76	4.15	0	2.38	1.40	
	4.88	0	0	0	1.68	0
	3PI	0	0	1.56		0.75
	3.31			9.03	0	0.95
	1.70					
HHCT38-5872	NIST-STRBASE					
	3.76	4.15	0.00	2.38	1.40	
	4.88	0.00	0.00	0.00	1.68	0.00
	3PI	0.00	0.00			0.75
	3.31	0.00	0.00		0.00	0.95
	1.70					
JVJYW7-5872	NIST-STRBASE					
	3.7594	4.1494		2.3753	1.4045	1.8755
	4.8780	0		0	1.6829	0
	3PI	0	0			0.7474
	3.3113	0	0		0	0.9526
	1.7030					

TABLE 2

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

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LCXADP-5872		NIST-STRBASE				
		3.7593	4.1493	0.0028	2.3752	1.4044
		4.8780	0.0040	0.0028	0.0028	1.6829
3PI		0.0030	1.6225	0.0010	1.5561	0.7473
		3.3112			9.0252	0.0000
		1.7029				0.9525
M6BRR2-5877		[Location Identifying Database]				
		8.489	2.627		2.364	1.554
		2.747				2.461
3PI			1.881		1.880	0.792
		5.426			8.945	0.904
		1.137				
MK3GTP-5877		[Location Identifying Database]				
			3.64		2.75	1.27
		5.54	0		1.65	0
3PI		0	1.59	0		0.77
		3.25			0	0.94
		1.58				
MQ8KG3-5872		NIST-STRBASE				
		3.7594	4.1494		2.3753	1.4045
		4.8780	0		0	1.6829
3PI		0	1.6226	0		0.7474
		3.3113	0	0		0.9526
		1.7030				
N34FBJ-5877		https://scispace.com/pdf/genetic-data-on-15-str-loci-in-the-caucasian-population-of-2ny0h2m3al.pdf				
		9.21	3.79	-	2.29	-
		4.62	0	0	0	1.68
3PI		0	1.69	0	-	0.84
		3.11			-	0.87
		1.80				
NA47V3-5872		FBI PopStats, FBI Popstats NIST 2017				
		3.75	4.14		2.37	1.40
		4.87				1.68
3PI			1.62		1.55	0.74
		3.31			NA	0.95
		NA				
NRJEW3-5872		FBI PopStats, NIST Population				
		3.75	4.14		2.37	1.40
		4.87				1.68
3PI			1.62		1.55	0.74
		3.31			NA	0.95
		NA				

TABLE 2

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

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PUHDKZ-5872 FBI PopStats, FBI Popstats NIST 2017 data set

	3.75	4.14		2.37	1.40	
	4.87				1.68	
3PI		1.62		1.55		0.74
	3.31					0.95

Q8QDVK-5872 NIST-STRBASE

	3.76	4.15	0	2.38	1.40	1.88
	4.88	0	0	0	1.68	0
3PI	0	1.62	0	1.56		0.75
	3.31	0	0	9.025	0	0.95
	1.70					

Q93U9X-5872 NIST-STRBASE

	3.7594	4.14938	0	2.3753	1.40449	
	4.87805	0	0	0	1.68294	0
3PI	0	1.62259	0	1.55618		0.74738
	3.31126	0	0	9.02527	0	0.95256
	1.703					

RCYYJG-5877 NIST-STRBASE

	3.638	3.985	0	2.359	1.422	
	4.623	0	0	omitted	1.641	0
3PI	0	1.586	0	1.524		0.7445
	3.041			6.884	0	0.9552
	1.607					

TEJ6GJ-5872 NIST-STRBASE

	3.7593	4.1493	0.0028	2.3752	1.4044	
	4.8780	0.0040	0.0028	0.0028	1.6829	0.0040
3PI	0.0030	1.6225	0.0010	1.5561		0.7473
	3.3112			9.0252	0.0000	0.9525
	1.7029					

TZGZPX-5872 FBI PopStats

	3.75	4.14		2.37	1.40	
	4.87				1.68	
3PI		1.62		1.55		0.74
	3.31			N/A		0.95
	N/A					

U8QRNU-5872 NIST-STRBASE

	3.76	4.15	0.00	2.38	1.40	1.88
	4.88	0.00	0.00	0.00	1.68	0.00
3PI	0.00	1.62	0.00	1.56		0.75
	3.31	0.00	0.00		0.00	0.95
	1.70					

TABLE 2

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

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ULB7RT-5872 NIST-STRBASE						
	3.7604	4.1494	0.0000	2.3750	1.4047	
	4.8784	0.0000	0.0000	0.0000	1.6830	0.0000
3PI	0.0000	1.6225	0.0000	1.5560		0.7474
	3.3119			9.0250	0.0000	0.9525
	1.7028					
UX6LVW-5872 FBI PopStats, NIST Population						
	3.75	4.14		2.37	1.40	
	4.87				1.68	
3PI		1.62		1.55		.74
	3.31			N/A		.95
	N/A					
VYHDND-5877 NIST-STRBASE						
	3.64	3.98	0.000	2.36	1.42	
	4.62	0.000	0.000	0.000	1.64	0.000
3PI	0.000	1.59	0.000	1.52		0.744
	3.04			6.88	0.000	0.955
	1.61					
W7B6AC-5877 NIST-STRBASE						
	3.64	3.98	0	2.36	1.42	
	4.62	0	0	0	1.64	0
3PI	0	1.59	0	1.52		0.744
	3.04			6.88	0	0.955
	omitted					
WAAF6C-5877 NIST-STRBASE						
	3.64	3.98	0	2.36	1.42	
	4.62	0	0	0	1.64	0
3PI	0	1.59	0	1.52		0.744
	3.04			6.88	0	0.955
	1.61					
WDWZBG-5872 NIST-STRBASE						
	3.7594	4.1494	0.0000	2.3753	1.4045	
	4.8780	0.0000	0.0000	0.0000	1.6829	0.0000
3PI	0.0000	1.6226	0.0000	1.5562		0.7474
	3.3113			9.0253	0.0000	0.9526
	1.7030					
Y782XD-5872 NIST-STRBASE						
	3.7593	4.1493	0.0028	2.3752	1.4044	
	4.8780	0.0040	0.0028	0.0028	1.6829	0.0040
3PI	0.0030	1.6225	0.0010	1.5561		0.7473
	3.3112			9.0252	0.0000	0.9525
	1.7029					

TABLE 2

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

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YMBV4D-5872 Caucasian (Identifiler)

	3.64	2.75	1.27	
	5.54	0	1.65	0
3PI	0	1.59	0	0.77
	3.25		0	0.94
	1.58			

Z7ZGGN-5877 NIST-STRBASE

	3.7594	4.1494	0.0000	2.3753	1.4045	N/A
	4.8780	0.0000	0.0000	0.0000	1.6829	0.0000
3PI	0.0000	1.6226	0.0000	1.5562		0.7474
	3.3113	N/A	N/A	9.0253	0.0000	0.9526
	1.7030					

Z9Q6YB-5877 Globalfiler Population Database (African American)

	8.6806	3.0845	0	2.2452	2	
	5.0378	0	0	0	1.3693	0
3PI	0	2.1358	0	2.1432		0.9764
	5.4083			19.3798	0	1.3924
	1.4347					

Z9QHKQ-5872 local database

	2.793296	4.310345	0.001312	3.205128	1.524390	
	5.000000	0.000171	0.001282	0.004381	1.633987	0.000011
3PI	0.000017	1.655629	0.000000	1.373626		0.919118
	3.246753	0.002145	0.000959	9.615385	0.000039	0.880282
	1.811594					

TABLE 2

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

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26MY2N-5872 NIST Promega						
	3.760	4.149	1.241	2.375	1.405	
	2.439	5.967	2.542	4.512	1.683	27.769
4PI	2.935	1.622	5.554	1.556		1.495
	3.312	4.298	6.564		2.900	0.953
	1.703					
2GGFQP-5872 FBI PopStats, NIST 2017						
	3.75	4.14	1.24	2.37	1.40	
	2.43	5.96	2.54	4.51	1.68	27.77
4PI	2.93	1.62	5.55	1.55		1.49
	3.31			N/A	2.89	0.952
	N/A					
37DKA7-5877 FBI PopStats						
	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852	4.8077	1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319			5.4585	3.2841	0.91408
	1.6426					
3ARHDM-5872 NIST-STRBASE						
	3.7594	4.1494		2.3753	1.4045	1.8755
	2.4390	5.9666		4.5126	1.6829	27.7778
4PI	2.9343	1.6226	5.5556			1.4948
	3.3113	4.2974	6.5617		2.8994	0.9526
	1.7030					
3C2ANN-5872 [Location Identifying Database]						
	112.4052844	58.39896652	54.04968952	8.117718778	504.5030819	
	6.311269209	79.79912707	10.55817181	431.8969828	35.36001276	176.8551678
4PI	105.6301042	21.19393064	13.00835506	2.716210343		12.29917205
	79.25572679	30.58150437	328.6098385		19.06904903	3.975058084
	38.19709702					
3LRVTM-5872 NIST-STRBASE						
	3.7593	4.1493	1.2403	2.3752	1.4044	
	2.4390	5.9665	2.5419	4.5126	1.6829	27.7777
4PI	2.9342	1.6225	5.5555	1.5561		1.4947
	3.3112	4.2973	6.5616		2.8993	0.9525
	1.7029					
3NA8CP-5872 FBI PopStats						
	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852	4.8077	1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319			5.4585	3.2841	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					

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48HUE9-5872 NIST-STRBASE						
	3.7594	4.1494	1.2404	2.3753	1.4045	
	2.4390	5.9666	2.5419	4.5126	1.6829	27.7778
4PI	2.9343	1.6226	5.5556	1.5562		1.4948
	3.3113			9.0253	2.8994	0.9526
	1.7030					
6KKKUL-5872 FBI PopStats, NIST						
	3.75	4.14	1.24	2.37	1.40	
	2.43	5.96	2.54	4.51	1.68	27.77
4PI	2.93	1.62	5.55	1.55		1.49
	3.31			N/A	2.89	0.95
	N/A					
77ZHP3-5872 NIST-STRBASE						
	4.7755	3.3647	1.3178	2.4485	1.5842	
	2.1312	7.0472	2.4838	-	1.6792	23.5849
4PI	2.9940	1.8142	5.4824	1.5581		1.6175
	4.2462			10.6837	4.8638	1.0725
	1.5346					
79BAXH-5877 NIST-STRBASE						
	3.7594	4.1494	1.2404	2.3753	1.4045	1.8801
	2.4390	5.9666	2.5419	4.5126	1.6829	27.7778
4PI	2.9343	1.6226	5.5556	1.5562		1.4948
	3.3113	4.2974	6.5617	9.0253	2.8994	0.9526
	1.7030					
79RJT6-5872 NIST-STRBASE						
	3.7593	4.1493	1.2403	2.3752	1.4044	
	2.4390	5.9665	2.5419	4.5126	1.6829	27.7777
4PI	2.9342	1.6225	5.5555	1.5561		1.4947
	3.3112			9.0252	2.8993	0.9525
	1.7029					
7AM2U7-5872 FBI PopStats, NIST-STRBASE, eDNA						
	3.7594	3.4554	1.2404	2.3764	1.2186	
	2.4631	6.8776	2.5419	4.5126	1.5936	25.1256
4PI	3.9185	1.6173	4.5579	1.5562		1.5969
	3.1358	5.0251	7.0423	9.0253	3.2841	0.9141
	1.6474					
7CQUMJ-5872 [Location Identifying Database]						
	4.21	4.00	1.31	2.61	1.39	
	2.26	7.49	2.58	4.03	1.72	52.8
4PI	3.69	1.66	6.29	1.25		1.63
	3.17			6.21	3.07	0.94
	1.49					

TABLE 2

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

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7EBBY6-5877 local, national database

	4.4341	4.9614	1.5232	2.5024		
		7.263	2.0541	3.7344		37.2165
4PI	3.2988	1.6962	3.3463	1.2919		
	3.3138			8.2964	3.5118	

7FP7MP-5872 NIST-STRBASE

	3.76332E+00	4.15176E+00	1.24161E+00	2.37687E+00	1.40612E+00	
	2.44107E+00	5.97109E+00	2.54415E+00	4.51561E+00	1.68453E+00	2.75720E+01
4PI	2.93762E+00	1.62429E+00	5.55679E+00	1.55752E+00		1.49621E+00
	3.31461E+00			9.03199E+00	2.90245E+00	9.53574E-01
	1.70385E+00					

7GMQT7-5872 [Location Identifying Database]

	3.5262	4.2880	1.2730	2.3104	1.4196	
	2.5985	6.2676	2.5445	4.1431	1.6936	29.7714
4PI	3.5084	1.7251	6.8104	1.5368		1.5616
	3.3211			6.9235	2.8844	0.9233
	1.6409					

7M8GX7-5872 NIST-STRBASE

	3.76	4.14	1.24	2.37	1.40	
	2.43	5.966	2.54	4.51	1.68	27.7
4PI	2.93	1.62	5.55	1.55		1.49
	3.31	4.29	6.56		2.89	0.952
	1.70					

7NK9N2-5877 NIST-STRBASE

	3.75	4.14	1.24	2.37	1.40	
	2.43	5.96	2.54	4.51	1.68	27.7
4PI	2.93	1.62	5.55	1.55		1.49
	3.31	4.29	6.56	9.02	2.89	0.952
	1.70					

7Q8TU6-5872 NIST-STRBASE

	3.7593	4.1493	1.2403	2.3752	1.4044	
	2.4390	5.9665	2.5419	4.5126	1.6829	27.7777
4PI	2.9342	1.6225	5.5555	1.5561		1.4947
	3.3112			9.0252	2.8993	0.9525
	1.7029					

87E42P-5877 NIST-STRBASE

	3.76	4.14	1.24	2.37	1.40	
	2.43	5.96	2.54	4.51	1.68	27.76
4PI	2.93	1.62	5.55	1.55		1.49
	3.31	4.29	6.56	9.02	2.89	0.952
	1.70					

TABLE 2

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

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8D2WB4-5877 NIST-STRBASE

	3.64	3.98	1.20	2.36	1.42	
	2.42	5.54	2.40	omitted	1.64	18.4
4PI	2.73	1.59	5.20	1.52		1.47
	3.04			6.88	2.78	0.955
	1.61					

8UZ9J6-5877 Caucasian

	3.465909092	4.552238788	1.210317460	2.798165131	1.349557523	
	2.382812495	7.439024363	3.050000004	4.841269818	1.657608697	25.416666857
4PI	3.910256424	1.685082872	5.258620701	1.349557523		1.671232875
	3.160621757			6.224489784	3.144329895	0.927051672
	1.495098041					

9HP47G-5872 NIST-STRBASE

	3.7594	4.1494		2.3753	1.4045	1.8755
	2.4390	5.9666		4.5126	1.6829	27.7778
4PI	2.9343	1.6226	5.5556			1.4948
	3.3113	4.2974	6.5617		2.8994	0.9526
	1.7030					

9ZLNM2-5877 NIST-STRBASE

	3.3715	2.5934	1.4393	2.7130	1.2827	
	1.8018	7.7399	2.3596		2.2056	26.178
4PI	3.1466	1.7352	3.9339	1.1743		1.5274
	4.2159			8.1433	4.5830	1.0305
	1.3721					

ARBL22-5872 NIST-STRBASE

	3.7593	4.1493	1.2403	2.3752	1.4044	
	2.4390	5.9665	2.5419	4.5126	1.6829	27.7777
4PI	2.9342	1.6225	5.5555	1.5561		1.4947
	3.3112			9.0252	2.8993	0.9525
	1.7029					

BFAMKE-5877 NIST-STRBASE

	3.7594	4.1494	1.2404	2.3753	1.4045	--
	2.4390	5.9666	2.5419	4.5126	1.6829	27.7778
4PI	2.9343	1.6226	5.5556	1.5562		1.4948
	3.3113	4.2974	6.5617	--	2.8994	0.9526
	1.7030					

BW XU2L-5877 FBI PopStats

	3.7594	4.1494	1.2404	2.3753	1.4045	
	2.439	5.9666	2.5419	4.5126	1.6829	27.778
4PI	2.9343	1.6226	5.5556	1.5562		1.4948
	3.3113			9.0253	2.8994	0.95256
	1.7030					

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

C68HBD-5877 NIST-STRBASE

	3.76	4.01	0.66	2.38	1.40	0.94
	3.14	5.97	2.54	3.88	0.84	27.77
4PI	2.93	0.81	5.55	1.56		0.75
	0.83	6.69	6.56		1.45	0.95
	0.85					

C8D3YD-5872 FBI PopStats

	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852	4.8077	1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319			5.4585	3.2841	0.91408
	1.6426					

CDHLGC-5877 NIST-STRBASE

	3.760	4.149	1.240	2.375	1.404	
	2.439	5.966	2.542	4.512	1.682	27.76
4PI	2.934	1.622	5.553	1.556		1.494
	3.311	4.297	6.563	9.025	2.899	0.952
	1.702					

CVHUHW-5872 NIST-STRBASE

	3.76	4.15	1.24	2.38	1.40	
	2.44	5.97	2.54		1.68	27.8
4PI	2.93	1.62	5.56	1.56		1.49
	3.31	4.30	6.56		2.90	0.953
	1.70					

CXLKRC-5872 Local Database

	3.18	4.73	1.35	2.08	1.49	
	2.55	6.59	2.15	3.78	1.66	38.76
4PI	2.77	1.74	6.70	1.34		1.69
	3.33	6.27	7.05	15.87	3.05	0.91
	1.71					

D7VFXB-5877 [Location Identifying Database]

	3.1250	3.7936	1.2987	2.2758	1.5361	
	2.4155	6.4683	2.3256	4.2553	1.6658	51.546
4PI	2.9638	1.6396	5.0710	1.4184		1.6617
	3.0656	5.1335	7.6104	10.526	3.1153	0.91025
	1.7367					

DHTC2X-5872 NIST-STRBASE

	3.76	4.15	1.24	2.38	1.40	1.88
	2.44	5.97	2.54	4.51	1.68	27.78
4PI	2.93	1.62	5.56	1.56		1.49
	3.31	4.30	6.56	9.03	2.90	0.95
	1.70					

TABLE 2

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

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DYD32W-5877 FBI PopStats

	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852		1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319			5.4585	3.2841	0.91408
	1.6426					

E94TFC-5872 NIST-STRBASE

	3.7593	4.1493	1.2403	2.3752	1.4044	
	2.4390	5.9665	2.5419	4.5126	1.6829	27.7777
4PI	2.9342	1.6225	5.5555	1.5561		1.4947
	3.3112	4.2973	6.5616		2.8993	0.9525
	1.7029					

EKCQ6X-5872 NIST-STRBASE

	3.7594	4.1494	1.2404	2.3753	1.4045	
	2.4390	5.9666	2.5419	4.5126	1.6829	27.7778
4PI	2.9343	1.6226	5.5556	1.5562		1.4948
	3.113			9.0253	2.8994	0.9526
	1.7030					

EL8A8Y-5877 FBI PopStats

	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852	4.8077	1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319				3.2841	0.91408
	1.6426					

EVTDDD-5872 NIST-STRBASE

	4.7755	3.3647	1.3179	2.4486	1.5843	
	2.1313	7.0472	2.4839	3.9557	1.6793	23.585
4PI	2.9940	1.8142	5.4825	1.5581		1.6176
	4.2463	5.8962	6.8587	10.684	4.8638	1.0725

EYTQUB-5872 NIST-STRBASE

	3.7593	4.1493	1.2403	2.3752	1.4044	
	2.4390	5.9665	2.5419	4.5126	1.6829	27.7777
4PI	2.9342	1.6225	5.5555	1.5561		1.4947
	3.3112			9.0252	2.8993	0.9525
	1.7029					

F9XX9B-5877 STRidER

	3,66	4,60	1,32	2,38	1,49	
	2,45	7,33	2,43	4,21	1,67	30,37
4PI	3,48	1,71	5,05	1,38		1,56
	3,15	4,43	5,96	7,91	3,27	0,92
	1,60					

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

FHP7ZU-5877	NIST-STRBASE					
	3.64	3.98	1.20	2.36	1.42	
	2.42	5.54	2.40	4.30	1.64	18.40
	2.73	1.59	5.20	1.52		1.47
	3.04			6.88	2.78	0.955
	Omitted					
FHZ9LR-5872	NIST-STRBASE					
	3.76	4.15	1.24	2.38	1.40	
	2.44	5.97	2.54		1.68	27.8
	2.93	1.62	5.56	1.56		1.49
	3.31	4.30	6.56		2.90	0.953
	1.70					
FJBB9Q-5872	NIST-STRBASE					
	3.76	4.15	1.24	2.38	1.40	
	2.44	5.97	2.54		1.68	27.8
	2.93	1.62	5.56	1.56		1.49
	3.31	4.30	6.56		2.90	0.953
	1.70					
G2AP7W-5877	FBI PopStats					
	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852	4.8077	1.6095	25.253
	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319			-	3.2841	0.91408
	1.6426					
G6UFUF-5872	NIST-STRBASE					
	3.76	4.15	1.24	2.38	1.40	
	2.44	5.97	2.54	4.51	1.68	27.78
	2.93	1.62	5.56	1.56		1.49
	3.31			9.03	2.90	0.95
	1.70					
HECFLA-5872	FBI PopStats					
	3.311	3.311	1.383	2.376	1.224	
	2.463	7.087	2.885	4.807	1.609	25.253
	3.739	1.590	4.591	1.374		1.596
	3.131			5.458	3.284	0.914
	1.642					
HG4EZ8-5872	[Location Identifying Database]					
	3.105	2.789	1.642	4.190	1.048	
	1.695	9.107	2.846	2.269	2.516	56.92
	3.521	2.105	3.881	1.035		1.506
	6.153			7.942	6.599	1.049
	1.159					

TABLE 2

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

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HHCT38-5872 NIST-STRBASE

	3.76	4.15	1.24	2.38	1.40	
	2.44	6.00	2.54	4.51	1.68	27.77
4PI	2.93	1.62	5.55			1.50
	3.31	4.30	6.56		2.90	0.95
	1.7					

JCHAHN-5872 NIST-STRBASE

	3.3715	2.5934	1.4393	2.7130	1.2827	
	1.8018	7.7399	2.3596		2.2056	26.178
4PI	3.1466	1.7352	3.9339	1.1743		1.5274
	4.2159			8.1433	4.5830	1.0305
	1.3721					

JVJYW7-5872 NIST-STRBASE

	3.7594	4.1494		2.3753	1.4045	1.8755
	2.4390	5.9666		4.5126	1.6829	27.7778
4PI	2.9343	1.6226	5.5556			1.4948
	3.3113	4.2974	6.5617		2.8994	0.9526
	1.7030					

KNT4BT-5872 NIST-STRBASE

	3.76	4.15	1.24	2.38	1.40	
	2.44	5.97	2.54	4.51	1.68	27.8
4PI	2.93	1.62	5.56	1.56		1.49
	3.31			9.03	2.90	0.95
	1.70					

L4ZMK6-5877 FBI PopStats

	4.7755	3.3647	1.3179	2.4486	1.5843	
	2.1313	7.0472	2.4839	3.9557	1.6793	23.585
4PI	2.9940	1.8142	5.4825	1.5581		1.6176
	4.2463			10.684	4.8638	1.0725
	1.5347					

LCE87P-5877 FBI PopStats

	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852		1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319			5.4585	3.2841	0.91408
	1.6426					

LCXADP-5872 NIST-STRBASE

	3.7593	4.1493	1.2403	2.3752	1.4044	
	2.4390	5.9665	2.5419	4.5126	1.6829	27.7777
4PI	2.9342	1.6225	5.5555	1.5561		1.4947
	3.3112			9.0252	2.8993	0.9525
	1.7029					

TABLE 2

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

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M6BRR2-5877	[Location Identifying Database]					
	8.489	2.627	1.638	2.364	1.554	
	1.374	9.737	2.470	2.854	2.461	66.200
4PI	2.758	1.881	3.762	1.880		1.584
	5.426			8.945	38.911	0.904
	1.137					
M9CQ9L-5872	NIST-STRBASE					
	3.76	4.15	1.24	2.38	1.40	
	2.44	5.97	2.54		1.68	27.8
4PI	2.93	1.62	5.56	1.56		1.49
	3.31	4.30	6.56		2.90	0.953
	1.70					
MGLELJ-5872	NIST-STRBASE					
	3.76	4.15	1.24	2.38	1.40	
	2.44	5.97	2.54		1.68	27.8
4PI	2.93	1.62	5.56	1.56		1.49
	3.31	4.30	6.56		2.90	0.953
	1.70					
MK3GTP-5877	[Location Identifying Database]					
		3.64		2.75	1.27	
	2.77	7.12			1.65	29.07
4PI	3.67	1.59	6.98			1.55
	3.25				3.44	0.94
	1.58					
MQ8KG3-5872	NIST-STRBASE					
	3.7594	4.1494		2.3753	1.4045	1.8755
	2.4390	5.9666		4.5126	1.6829	27.7778
4PI	2.9343	1.6226	5.5556			1.4948
	3.3113	4.2974	6.5617		2.8994	0.9526
	1.7030					
MVK7L3-5872	NIST-STRBASE, [Location Identifying Database]					
	9.4706	4.5148	8.593	3.3785	8.775	
	4.5519	32.7468	5.5677	9.0788	5.0635	17.9722
4PI	15.6723	4.6232	8.5095	1.3789		2.6401
	28.7725	31.1643	78.2228		21.0828	1.0974
	4.6477					
MYJGG3-5872	[Location Identifying Database]					
	1.623	1.152		2.459	0.562	
	0.903	5.051		1.429	2.242	28.617
4PI	2.809	2.475	1.761			1.718
	5.363	2.825	8.621		4.785	0.931
	0.767					

TABLE 2

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

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N34FBJ-5877	https://scispace.com/pdf/genetic-data-on-15-str-loci-in-the-caucasian-population-of-2ny0h2m3al.pdf					
	9.21	3.79	-	2.29	-	
	2.31	6.17	2.32	2.19	1.68	20.66
4PI	2.74	1.69	4.40	-		1.67
	3.11			-	3.21	0.87
	1.80					
N4DX83-5872	NIST-STRBASE					
	3.76	4.15	1.24	2.38	1.4	
	2.44	5.97	2.54	4.51	1.68	27.8
4PI	2.93	1.62	5.55	1.56		1.49
	3.31			9.03	2.9	0.953
	N/A					
NA47V3-5872	FBI PopStats, FBI Popstats NIST 2017					
	3.75	4.14	1.24	2.37	1.40	
	2.43	5.96	2.54	4.51	1.68	27.77
4PI	2.93	1.62	5.55	1.55		1.49
	3.31			NA	2.89	0.95
	NA					
NRJEW3-5872	FBI PopStats, NIST Population					
	3.75	4.14	1.24	2.37	1.40	
	2.43	5.96	2.54	4.51	1.68	27.77
4PI	2.93	1.62	5.55	1.55		1.49
	3.31			NA	2.89	0.95
	NA					
PUHDKZ-5872	FBI PopStats, FBI Popstats NIST 2017 data set					
	3.75	4.14	1.24	2.37	1.40	
	2.43	5.96	2.54	4.51	1.68	27.77
4PI	2.93	1.62	5.55	1.55		1.49
	3.31				2.89	0.95
PYXLBL-5877	FBI PopStats					
	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852		1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319			5.4585	3.2841	0.91408
	1.6426					
Q8QDVK-5872	NIST-STRBASE					
	3.76	4.15	1.24	2.37	1.40	1.88
	2.44	5.97	2.54	4.51	1.68	27.78
4PI	2.93	1.62	5.56	1.56		1.49
	3.31	4.30	6.56	9.03	2.90	0.95
	1.70					

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

Q93U9X-5872 NIST-STRBASE

	3.7594	4.14938	1.24039	2.3753	1.40449	
	2.43902	5.96659	2.54194	4.51264	1.68294	27.77778
4PI	2.93427	1.62259	5.55556	1.55618		1.49477
	3.31126	4.29738	6.56168	9.02527	2.89939	0.95256
	1.703					

RCYYJG-5877 NIST-STRBASE

	3.638	3.985	1.201	2.359	1.422	
	2.420	5.543	2.400	omitted	1.641	18.40
4PI	2.732	1.586	5.197	1.524		1.468
	3.041			6.884	2.775	0.9552
	1.607					

T6DKW3-5877 FBI PopStats

	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852	4.8077	1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319				3.2841	0.91408
	1.6426					

T76MGW-5872

	4.6296	3.5714	1.3850	2.4876	1.4327	1.7422
	2.3810	7.2993	2.4876	3.8462	1.7361	27.7778
4PI	3.1056	1.7857	5.4945	1.4970		1.5974
	3.8314	4.8077	5.7471	7.4627	4.3668	0.8961
	1.5152					

TEJ6GJ-5872 NIST-STRBASE

	3.7593	4.1493	1.2403	2.3752	1.4044	
	2.4390	5.9665	2.5419	4.5126	1.6829	27.7777
4PI	2.9342	1.6225	5.5555	1.5561		1.4947
	3.3112			9.0252	2.8993	0.9525
	1.7029					

TZGZPX-5872 FBI PopStats

	3.75	4.14	1.24	2.37	1.40	
	2.43	5.96	2.54	4.51	1.68	27.77
4PI	2.93	1.62	5.55	1.55		1.49
	3.31			N/A	2.89	0.95
	N/A					

U8QRNU-5872 NIST-STRBASE

	3.76	4.15	1.24	2.38	1.40	1.88
	2.44	5.97	2.54	4.51	1.68	27.78
4PI	2.93	1.62	5.56	1.56		1.49
	3.31	4.30	6.56		2.90	0.95
	1.70					

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

UBUHYF-5872 FBI PopStats

	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852	4.8077	1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319			5.4585	3.2841	0.91408
	1.6426					

ULB7RT-5872 NIST-STRBASE

	3.7604	4.1494	1.2406	2.3750	1.4047	
	2.4392	5.9669	2.5423	4.5125	1.6830	27.7692
4PI	2.9350	1.6225	5.5538	1.5560		1.4948
	3.3119			9.0250	2.8996	0.9525
	1.7028					

UPBHNT-5872 FBI PopStats

	3.31	3.31	1.38	2.38	1.22	
	2.46	7.09	2.89	4.81	1.61	25.25
4PI	3.74	1.59	4.59	1.37		1.60
	3.13			5.46	3.28	0.914
	1.64					

UX6LVW-5872 FBI PopStats, NIST Population

	3.75	4.14	1.24	2.37	1.40	
	2.43	5.96	2.54	4.51	1.68	27.77
4PI	2.93	1.62	5.55	1.55		1.49
	3.31			N/A	2.89	.95
	N/A					

VE9GNU-5872 NIST-STRBASE

	3.7593	4.1493	1.2403	2.3752	1.4044	
	2.4390	5.9665	2.5419	4.5126	1.6829	27.7777
4PI	2.9342	1.6225	5.5555	1.5561		1.4947
	3.3112	4.2973	6.5616		2.8993	0.9525
	1.7029					

VP93WE-5877 FBI PopStats

	3.3113	3.3113	1.3835	2.3764	1.2243	
	2.4631	7.0872	2.8852		1.6095	25.253
4PI	3.7397	1.5906	4.5914	1.3740		1.5969
	3.1319			5.4585	3.2841	0.91408
	1.6426					

VYHDND-5877 NIST-STRBASE

	3.64	3.98	1.20	2.36	1.42	
	2.42	5.54	2.40	omitted	1.64	18.4
4PI	2.73	1.59	5.20	1.52		1.47
	3.04			6.88	2.78	0.955
	1.61					

TABLE 2

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

Item 4PI - Paternity Index Results

W7B6AC-5877		NIST-STRBASE				
		3.64	3.98	1.20	2.36	1.42
		2.42	5.54	2.40	omitted	1.64
4PI		2.73	1.59	5.20	1.52	1.47
		3.04			6.88	2.78
		1.61				0.955
WAAF6C-5877		NIST-STRBASE				
		3.64	3.98	1.20	2.36	1.42
		2.42	5.54	2.40	omitted	1.64
4PI		2.73	1.59	5.20	1.52	1.47
		3.04			6.88	2.78
		1.61				0.955
WDUAZR-5872		NIST-STRBASE				
		3.7593	4.1493	1.2403	2.3752	1.4044
		2.4390	5.9665	2.5419	4.5126	1.6829
4PI		2.9342	1.6225	5.5555	1.5561	1.4947
		3.3112			9.0252	2.8993
		1.7029				0.9525
WDWZBG-5872		NIST-STRBASE				
		3.7594	4.1494	1.2404	2.3753	1.4045
		2.4390	5.9666	2.5419	4.5126	1.6829
4PI		2.9343	1.6226	5.5556	1.5562	1.4948
		3.3113			9.0253	2.8994
		1.7030				0.9526
WLND9V-5872		FBI PopStats				
		3.3113	3.3113	1.3835	2.3764	1.2243
		2.4631	7.0872	2.8852	4.8077	1.6095
4PI		3.7397	1.5906	4.5914	1.3740	1.5969
		3.1319			5.4585	3.2841
						0.91408
Y2RT8T-5872		FBI PopStats				
		3.3113	3.3113	1.3835	2.3764	1.2243
		2.4631	7.0872	2.8852	4.8077	1.6095
4PI		3.7397	1.5906	4.5914	1.3740	1.5969
		3.1319			5.4585	3.2841
						0.91408
Y782XD-5872		NIST-STRBASE				
		3.7593	4.1493	1.2403	2.3752	1.4044
		2.4390	5.9665	2.5419	4.5126	1.6829
4PI		2.9342	1.6225	5.5555	1.5561	1.4947
		3.3112			9.0252	2.8993
		1.7029				0.9525

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

YMBV4D-5872 Caucasian (Identifiler)

	3.64	2.75	1.27		
	2.77	7.12		1.65	29.07
4PI	3.67	1.59	6.98		1.55
	3.25			3.44	0.94
	1.58				

Z7ZGGN-5877 NIST-STRBASE

	3.7594	4.1494	1.2404	2.3753	1.4045	N/A
	2.4390	5.9666	2.5419	4.5126	1.6829	27.7778
4PI	2.9343	1.6226	5.5556	1.5562		1.4948
	3.3113	N/A	N/A	9.0253	2.8994	0.9526

Not Reported

Z9Q6YB-5877 Globalfiler Population Database (African American)

	8.6806	3.0845	1.3305	2.2452	2	
	2.5189	8.8028	2.7056	4.3403	1.3693	15.0150
4PI	3.0266	2.1358	7.0225	2.1432		1.9527
	5.4083			19.3798	12.0048	1.3924
	1.4347					

Z9QHKQ-5872 local database

	2.793296	4.310345	1.312336	3.205128	1.524390	
	2.500000	5.434783	2.564103	5.154639	1.633987	25.000000
4PI	3.125000	1.655629	4.310345	1.373626		1.838235
	3.246753	5.917160	7.462687	9.615385	3.086420	0.880282
	1.811594					

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										
26MY2N-5872		PowerPlex® Y 23								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
3C2ANN-5872		PowerPlex® Y 23								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
3LRVTM-5872		Yfiler®								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
3NA8CP-5872		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
79BAXH-5877		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
79RJT6-5872		Yfiler®								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
7AM2U7-5872		PowerPlex® Y 23								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
7FP7MP-5872		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
7GMQT7-5872		Yfiler® plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		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										
7K2W9K-5872		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
7Q8TU6-5872		Yfiler®								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
8D2WB4-5877		Yfiler®								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
ARBL22-5872		Yfiler®								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
BB2Y8D-5872		PowerPlex® Y								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
BFAMKE-5877		PowerPlex® Y 23								
2	--	14	11,13	13	29	25	11	14	13	
	15	12	12	18	--	17	17	--	23	
	--	13	12	16	15	--	24	10	12	
BW XU2L-5877		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
CXLRKC-5872		PowerPlex® Y 23 System								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
D7VFXB-5877		PowerPlex® Y 23								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
DH TC2X-5872		Yfiler® Plus, PowerPlex® Y 23								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13	12	16	15	21	24	10	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										
E94TFC-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
2	15	12	12	18		17	17			
							24		12	
EVTDDD-5872		35GY								
			11,13			25	11			
2	12			18		17	17		23	
							24	10		
EYTQUB-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
2	15	12	12	18		17	17			
							24		12	
F9XX9B-5877		PowerPlex® Y 23								
		14	11,13	13	29	25	11	14	13	
2	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
FEJQKB-5872		PowerPlex® Y 23								
		14	11,13	13	29	25	11	14	13	
2	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
FJBB9Q-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
2	15	12	12	18		17	17			
							24		12	
G6UFUF-5872		PowerPlex® Y 23								
		14	11,13	13	29	25	11	14	13	
2	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
HG4EZ8-5872		Yfiler® PLUS								
	36,39	14	11,13	13	29	25	11	14	13	
2	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
HHCT38-5872		PowerPlex® Y								
		14	11,13	13	29	25	11	14	13	
2	15	12	12	18		17	17		23	
		13	12	16	19		24	10	12	
LCXADP-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
2	15	12	12	18		17	17			
							24		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										
M6BRR2-5877		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
MYJGG3-5872		PowerPlex® Y 23 System								
2	14	11,13	13	29	25	11	14	13		
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
N34FBJ-5877		Yfiler®								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
N4DX83-5872		Yfiler® Plus, ForenSeq Sig Prep								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13	12	16	15	21	24	10	12	
Q8QDVK-5872		PowerPlex® Y 23								
2	14	11,13	13	29	25	11	14	13		
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
Q93U9X-5872		PowerPlex® Y 23								
2	14	11,13	13	29	25	11	14	13		
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
T76MGW-5872		Microreader Y Prime Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13	12	16	15	21	24	10	12	
TEJ6GJ-5872		Yfiler®								
2	14	11,13	13	29	25	11	14	13		
	15	12	12	18		17	17			
							24		12	
ULB7RT-5872		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
UPBHNT-5872		PowerPlex® Y 23								
2	14	11,13	13	29	25	11	14	13		
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	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										
VE9GNU-5872		Yfiler®								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
WDUAZR-5872		Yfiler®								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
WLND9V-5872		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
Y2RT8T-5872		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
Y782XD-5872		Yfiler®								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
YMBV4D-5872		Yfiler® Plus								
2	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
Z9Q6YB-5877		Yfiler® Plus								
2	36,39	14,14	11,13	13,13	29,29	25,25	11,11	14,14	13,13	
	15,15	12,12	12,12	18,18	30,30	17,17	17,17	11,11	23,23	
	38,38	13,13		16,16	15,15	21,21	24,24		12,12	
Z9QHKQ-5872		Yfiler®								
2		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		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										
26MY2N-5872		PowerPlex® Y 23								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
3C2ANN-5872		PowerPlex® Y 23								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
3LRVTM-5872		Yfiler®								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16			
							21		11	
3NA8CP-5872		Yfiler® Plus								
3	37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	
79BAXH-5877		Yfiler® Plus								
3	37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	
79RJT6-5872		Yfiler®								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16			
							21		11	
7AM2U7-5872		PowerPlex® Y 23								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
7FP7MP-5872		Yfiler® Plus								
3	37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	
7GMQT7-5872		Yfiler® plus								
3	37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	
7K2W9K-5872		Yfiler® Plus								
3	37,37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	

TABLE 3

WebCode-Test		Amplification Kit								
Item		DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
		DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
Item 3 - YSTR Results										
7Q8TU6-5872		Yfiler®								
		14	14,15	12	28	23	11	11	14	
3	16	10	11	20		14	16			
							21			11
8D2WB4-5877		Yfiler®								
		14	14,15	12	28	23	11	11	14	
3	16	10	11	20		14	16			
							21			11
ARBL22-5872		Yfiler®								
		14	14,15	12	28	23	11	11	14	
3	16	10	11	20		14	16			
							21			11
BB2Y8D-5872		PowerPlex® Y								
		14	14,15	12	28	23	11	11	14	
3	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
BFAMKE-5877		PowerPlex® Y 23								
	--	14	14,15	12	28	23	11	11	14	
3	16	10	11	20	--	14	16	--	25	
	--	11	12	19	16	--	21	13	11	
BWXU2L-5877		Yfiler® Plus								
	37	14	14,15	12	28	23	11	11	14	
3	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	
CXLRKC-5872		PowerPlex® Y 23 System								
		14	14,15	12	28	23	11	11	14	
3	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
D7VFXB-5877		PowerPlex® Y 23								
		14	14,15	12	28	23	11	11	14	
3	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
DHTC2X-5872		Yfiler® Plus, PowerPlex® Y 23								
	37	14	14,15	12	28	23	11	11	14	
3	16	10	11	20	28	14	16	10	25	
	42	11	12	19	16	21	21	13	11	
E94TFC-5872		Yfiler®								
		14	14,15	12	28	23	11	11	14	
3	16	10	11	20		14	16			
							21			11

TABLE 3

WebCode-Test		Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4	
Item 3 - YSTR Results										
EVTDDD-5872		35GY								
3			14,15			23	11			
	10			20		14	16		25	
							21	13		
EYTQUB-5872		Yfiler®								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16			
							21		11	
F9XX9B-5877		PowerPlex® Y 23								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
			11	12	19	16		21	13	11
FEJQKB-5872		PowerPlex® Y 23								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
			11	12	19	16		21	13	11
FJBB9Q-5872		Yfiler®								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16			
							21		11	
G6UFUF-5872		PowerPlex® Y 23								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
			11	12	19	16		21	13	11
HG4EZ8-5872		Yfiler® PLUS								
3	37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	
HHCT38-5872		PowerPlex® Y								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
			11	12	19	19		21	13	11
LCXADP-5872		Yfiler®								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16			
							21		11	
M6BRR2-5877		Yfiler® Plus								
3	37,37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	

TABLE 3

WebCode-Test		Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4	
Item 3 - YSTR Results										
MYJGG3-5872		PowerPlex® Y 23 System								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
N34FBJ-5877		Yfiler®								
3	37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	
N4DX83-5872		Yfiler® Plus, ForenSeq Sig Prep								
3	37,37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11	12	19	16	21	21	13	11	
Q8QDVK-5872		PowerPlex® Y 23								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
Q93U9X-5872		PowerPlex® Y 23								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
T76MGW-5872		Microreader Y Prime Plus								
3	37,37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11	12	19	16	21	21	13	11	
TEJ6GJ-5872		Yfiler®								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16			
							21		11	
ULB7RT-5872		Yfiler® Plus								
3	37,37	14	14,15	12	28	23	11	11	14	
	16	10	11	20	28	14	16	10	25	
	42	11		19	16	21	21		11	
UPBHNT-5872		PowerPlex® Y 23								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16		25	
		11	12	19	16		21	13	11	
VE9GNU-5872		Yfiler®								
3		14	14,15	12	28	23	11	11	14	
	16	10	11	20		14	16			
							21		11	

TABLE 3

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

Item 3 - YSTR Results

WDUAZR-5872	Yfiler®								
		14	14,15	12	28	23	11	11	14
3	16	10	11	20		14	16		
							21		11
WLND9V-5872	Yfiler® Plus								
	37	14	14,15	12	28	23	11	11	14
3	16	10	11	20	28	14	16	10	25
	42	11		19	16	21	21		11
Y2RT8T-5872	Yfiler® Plus								
	37	14	14,15	12	28	23	11	11	14
3	16	10	11	20	28	14	16	10	25
	42	11		19	16	21	21		11
Y782XD-5872	Yfiler®								
		14	14,15	12	28	23	11	11	14
3	16	10	11	20		14	16		
							21		11
YMBV4D-5872	Yfiler® Plus								
	37,37	14	14,15	12	28	23	11	11	14
3	16	10	11	20	28	14	16	10	25
	42	11		19	16	21	21		11
Z9Q6YB-5877	Yfiler® Plus								
	37,37	14,14	14,15	12,12	28,28	23,23	11,11	11,11	14,14
3	16,16	10,10	11,11	20,20	28,28	14,14	16,16	10,10	25,25
	42,42	11,11		19,19	16,16	21,21	21,21		11,11
Z9QHKQ-5872	Yfiler®								
		14	14,15	12	28	23	11	11	14
3	16	10	11	20		14	16		
							21		11

TABLE 3

WebCode-Test		Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4	
Item 4 - YSTR Results										
26MY2N-5872		PowerPlex® Y 23								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	7		23	
		13	12	16	15		24	10	12	
3C2ANN-5872		PowerPlex® Y 23								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
3LRVTM-5872		Yfiler®								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
3NA8CP-5872		Yfiler® Plus								
4	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
79BAXH-5877		Yfiler® Plus								
4	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
79RJT6-5872		Yfiler®								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
7AM2U7-5872		PowerPlex® Y 23								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
7FP7MP-5872		Yfiler® Plus								
4	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
7GMQT7-5872		Yfiler® plus								
4	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
7K2W9K-5872		Yfiler® Plus								
4	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	

TABLE 3

WebCode-Test		Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4	
Item 4 - YSTR Results										
7Q8TU6-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
4	15	12	12	18		17	17			
							24		12	
8D2WB4-5877		Yfiler®								
		14	11,13	13	29	25	11	14	13	
4	15	12	12	18		17	17			
							24		12	
ARBL22-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
4	15	12	12	18		17	17			
							24		12	
BB2Y8D-5872		PowerPlex® Y								
		14	11,13	13	29	25	11	14	13	
4	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
BFAMKE-5877		PowerPlex® Y 23								
	--	14	11,13	13	29	25	11	14	13	
4	15	12	12	18	--	17	17	--	23	
	--	13	12	16	15	--	24	10	12	
BW XU2L-5877		Yfiler® Plus								
	36,39	14	11,13	13	29	25	11	14	13	
4	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
CXLRKC-5872		PowerPlex® Y 23 System								
		14	11,13	13	29	25	11	14	13	
4	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
D7VFXB-5877		PowerPlex® Y 23								
		14	11,13	13	29	25	11	14	13	
4	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
DH TC2X-5872		Yfiler® Plus, PowerPlex® Y 23								
	36,39	14	11,13	13	29	25	11	14	13	
4	15	12	12	18	30	17	17	11	23	
	38	13	12	16	15	21	24	10	12	
E94TFC-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
4	15	12	12	18		17	17			
							24		12	

TABLE 3

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

Item 4 - YSTR Results

EVTDDD-5872		35GY								
		11,13			25		11			
4		12			18		17	17		23
									24	10
EYTQUB-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
4		15	12	12	18		17	17		
									24	12
F9XX9B-5877		PowerPlex® Y 23								
		14	11,13	13	29	25	11	14	13	
4		15	12	12	18		17	17		23
		13	12	16	15		24	10	12	
FEJQKB-5872		PowerPlex® Y 23								
		14	11,13	13	29	25	11	14	13	
4		15	12	12	18		17	17		23
		13	12	16	15		24	10	12	
FJBB9Q-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
4		15	12	12	18		17	17		
									24	12
G6UFUF-5872		PowerPlex® Y 23								
		14	11,13	13	29	25	11	14	13	
4		15	12	12	18		17	17		23
		13	12	16	15		24	10	12	
HG4EZ8-5872		Yfiler® PLUS								
		36,39	14	11,13	13	29	25	11	14	13
4		15	12	12	18	30	17	17	11	23
		38	13		16	15	21	24		12
HHCT38-5872		PowerPlex® Y								
		14	11,13	13	29	25	11	14	13	
4		15	12	12	18		17	17		23
		13	12	16	19		24	10	12	
LCXADP-5872		Yfiler®								
		14	11,13	13	29	25	11	14	13	
4		15	12	12	18		17	17		
									24	12
M6BRR2-5877		Yfiler® Plus								
		36,39	14	11,13	13	29	25	11	14	13
4		15	12	12	18	30	17	17	11	23
		38	13		16	15	21	24		12

TABLE 3

WebCode-Test		Amplification Kit								
Item		DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
		DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
Item 4 - YSTR Results										
MYJGG3-5872		PowerPlex® Y 23 System								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
N34FBJ-5877		Yfiler®								
4	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
N4DX83-5872		Yfiler® Plus, ForenSeq Sig Prep								
4	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13	12	16	15	21	24	10	12	
Q8QDVK-5872		PowerPlex® Y 23								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
Q93U9X-5872		PowerPlex® Y 23								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
T76MGW-5872		Microreader Y Prime Plus								
4	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13	12	16	15	21	24	10	12	
TEJ6GJ-5872		Yfiler®								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	
ULB7RT-5872		Yfiler® Plus								
4	36,39	14	11,13	13	29	25	11	14	13	
	15	12	12	18	30	17	17	11	23	
	38	13		16	15	21	24		12	
UPBHNT-5872		PowerPlex® Y 23								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17		23	
		13	12	16	15		24	10	12	
VE9GNU-5872		Yfiler®								
4		14	11,13	13	29	25	11	14	13	
	15	12	12	18		17	17			
							24		12	

TABLE 3

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

Item 4 - YSTR Results

WDUAZR-5872

		14	11,13	13	29	25	11	14	13
4	15	12	12	18		17	17		
							24		12

WLND9V-5872 Yfiler® Plus

	36,39	14	11,13	13	29	25	11	14	13
4	15	12	12	18	30	17	17	11	23
	38	13		16	15	21	24		12

Y2RT8T-5872 Yfiler® Plus

	36,39	14	11,13	13	29	25	11	14	13
4	15	12	12	18	30	17	17	11	23
	38	13		16	15	21	24		12

Y782XD-5872 Yfiler®

		14	11,13	13	29	25	11	14	13
4	15	12	12	18		17	17		
							24		12

YMBV4D-5872 Yfiler® Plus

	36,39	14	11,13	13	29	25	11	14	13
4	15	12	12	18	30	17	17	11	23
	38	13		16	15	21	24		12

Z9Q6YB-5877 Yfiler® Plus

	36,39	14,14	11,13	13,13	29,29	25,25	11,11	14,14	13,13
4	15,15	12,12	12,12	18,18	30,30	17,17	17,17	11,11	23,23
	38,38	13,13		16,16	15,15	21,21	24,24		12,12

Z9QHKQ-5872 Yfiler®

		14	11,13	13	29	25	11	14	13
4	15	12	12	18		17	17		
							24		12

Additional DNA & PI Results

TABLE 4

Locus	WebCode-Test	Item 1	Item 2	Item 3	Item 3 PI	Item 4	Item 4 PI
D10S1435	T76MGW-5872	13,14	11,13	13,13		11,12	2.4706
D10S2325	T76MGW-5872	7,12	7,13	12,12		10,13	3.4247
	Z9QHKQ-5872	7,12	7,13	12	0.001880	10,13	3.759398
D11S2368	T76MGW-5872	20,21	20,20	18,21		20,22	2.3596
D13S325	T76MGW-5872	18,20	20,20	20,21		19,20	1.9266
D14S1434	T76MGW-5872	13,13	10,13	14,14		10,13	2.7451
D15S659	T76MGW-5872	14,16	16,16	14,16		15,16	3.1579
D17S1301	N4DX83-5872	10,11	11,11	11,13		11,12	
	T76MGW-5872	10,11	11,11	11,13		11,12	1.3462
D18S1634	T76MGW-5872	15,15	13,15	14,15		13,13	5.0000
D19S253	T76MGW-5872	12,13	7,13	11,13		7,7	3.5294
D20S482	N4DX83-5872	13,13	13,14	12,14		14,15	
	T76MGW-5872	13,13	13,14	12,14		14,15	1.1053
D21S2055	T76MGW-5872	19.1,33	19.1,33	20.1,25		25,33	1.5000
	Z9QHKQ-5872	19.1,33	19.1,33	20.1,25	0.001466	25,33	1.466276
D22GATA198B05	T76MGW-5872	18,22	19,22	19,22		19,20	3.3071
D2S1360	T76MGW-5872	20,25	20,28	22,30		22,28	11.1111
	Z9QHKQ-5872	20,25	20,28	22,30	0.001087	22,28	21.739130
D3S1744	T76MGW-5872	16,17	16,18	14,16		17,18	2.8571
	Z9QHKQ-5872	16,17	16,18	14,16	0.000127	17,18	2.538071
D3S3045	T76MGW-5872	13,14	13,13	11,13		13,14	1.8667
D4S2366	T76MGW-5872	10,14	9,10	12,12		9,10	1.3770
	Z9QHKQ-5872	10,14	9,10	12	0.000007	9,10	1.440922
D4S2408	N4DX83-5872	8,11	8,11	8,8		9,11	
D5S2500	T76MGW-5872	10,11	11,12	11,11		12,15	3.0120
	Z9QHKQ-5872	10,11	11,12	11	0.001553	12,15	3.105590
D5S2800	T76MGW-5872	17,18	17,18	18,18		17,23	0.8350
D6S474	T76MGW-5872	13,16	16,16	13,15		14,16	1.8051
	Z9QHKQ-5872	13,16	16	13,15	0.000877	14,16	1.754386
D6S477	T76MGW-5872	13,13	13,16	16,16		16,16	6.4122
D7S11517	Z9QHKQ-5872	22,25	22,25	19,26	0.001603	24,25	1.602564
D7S1517	T76MGW-5872	22,25	22,25	19,26		24,25	1.5385

TABLE 4

Locus	WebCode-Test	Item 1	Item 2	Item 3	Item 3 PI	Item 4	Item 4 PI
D7S3048	T76MGW-5872	21,21	21,24	18,25		21,24	3.1818
D8S1132	T76MGW-5872	21,21	17,21	22,23		17,17	8.6598
	Z9QHKQ-5872	21	17,21	22,23	0.000000	17	10.526316
D9S1122	N4DX83-5872	13,13	13,13	11,13		11,13	
	T76MGW-5872	13,13	13,13	11,13		11,13	1.4947
DYF404S1	T76MGW-5872		14,15	13,14		14,15	
DYS385A	HHCT38-5872		11	14		11	
DYS385B	HHCT38-5872		13	15		13	
DYS444	T76MGW-5872		12	13		12	
DYS447	T76MGW-5872		25	23		25	
DYS505	N4DX83-5872	NR	12	11		12	
DYS522	N4DX83-5872	NR	11	11		11	
DYS527	T76MGW-5872		21,23	22,24		21,23	
DYS557	T76MGW-5872		16	16		16	
DYS596	T76MGW-5872		16	15		16	
DYS612	N4DX83-5872	NR	31	28		31	
F13A01	DHTC2X-5872	6,6	4,6	5,7		4,5	19.01
	Q8QDVK-5872	6	4,6	5,7	0	4,5	19.01
	T76MGW-5872	6,6	4,6	5,7		4,5	8.1967
	U8QRNU-5872	6	4,6	5,7	0.00	4,5	19.01
F13B	DHTC2X-5872	10,10	10,10	10,10		10,10	2.57
	Q8QDVK-5872	10	10	10	2.57	10	2.57
	T76MGW-5872	10,10	10,10	10,10		10,10	2.1786
	U8QRNU-5872	10	10	10	2.57	10	2.57
FES/FPS	T76MGW-5872	11,12	12,12	10,12		11,12	1.8450
FESFPS	DHTC2X-5872	11,12	12,12	10,12		11,12	2.12
	Q8QDVK-5872	11,12	12	10,12	2.12	11,12	2.12
	U8QRNU-5872	11,12	12	10,12	2.12	11,12	2.12
LPL	DHTC2X-5872	10,10	10,13	10,11		10,13	14.45
	Q8QDVK-5872	10	10,13	10,11	0	10,13	14.45
	T76MGW-5872	10,10	10,13	10,11		10,13	8.1967
	U8QRNU-5872	10	10,13	10,11	0.00	10,13	14.45
PENTA C	DHTC2X-5872	9,13	9,12	11,13		12,13	2.38

TABLE 4

Locus	WebCode-Test	Item 1	Item 2	Item 3	Item 3 PI	Item 4	Item 4 PI
PENTA C cont'd	Q8QDVK-5872	9,13	9,12	11,13	0	12,13	2.37
	T76MGW-5872	9,13	9,12	11,13		12,13	2.6455
	U8QRNU-5872	9,13	9,12	11,13	0.00	12,13	2.38

Paternity DNA Statistics & Conclusions

TABLE 5

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
26MY2N-5872	Item 4 - Alleged Father B	3018203000	99.99999997	NIST Promega
2GGFQP-5872	Item 4 - Alleged Father B	280,000,000	99.9999%	FBI PopStats, NIST 2017
37DKA7-5877	Item 4 - Alleged Father B	2,194,000,000		FBI PopStats
3ARHDM-5872	Item 4 - Alleged Father B	5.203E9		NIST-STRBASE
3C2ANN-5872	Item 4 - Alleged Father B	3.2033E010	99.9999%	[Location Identifying Database]
3LRVTM-5872	Item 4 - Alleged Father B	13.6 billion	99.9%	NIST-STRBASE
3NA8CP-5872	Item 4 - Alleged Father B	1,336,000,000	99.99%	FBI PopStats
48HUE9-5872	Item 4 - Alleged Father B	4356479709.6813	99.9999%	NIST-STRBASE
6KKKUL-5872	Item 4 - Alleged Father B	283,000,000	99.9999%	FBI PopStats, NIST
77ZHP3-5872	Item 4 - Alleged Father B	3300000000	99.9999	NIST-STRBASE
79BAXH-5877	Item 4 - Alleged Father B	27,222,255,223.2715	99.9999%	NIST-STRBASE
79RJT6-5872	Item 4 - Alleged Father B	4.3564E09	99.9999%	NIST-STRBASE
7AM2U7-5872	Item 4 - Alleged Father B	129,085,990,127.7520	99.9999%	FBI PopStats, NIST-STRBASE, eDNA
7CQUMJ-5872	Item 4 - Alleged Father B	8416432206		[Location Identifying Database]
7EBBY6-5877	Item 4 - Alleged Father B	593963897.5	99.99999983	local, national database
7FP7MP-5872	Item 4 - Alleged Father B	4398760197	99.99999998	NIST-STRBASE
7GMQT7-5872	Item 4 - Alleged Father B	5.434.292.257	99.9999999816%	[Location Identifying Database]
7K2W9K-5872	Item 4 - Alleged Father B	3.986E09		Laboratory Specific Database
7M8GX7-5872	Item 4 - Alleged Father B	14,000,000,000	99.9%	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
7NK9N2-5877	Item 4 - Alleged Father B	122,900,000,000	99.9999999991863%	NIST-STRBASE
7Q8TU6-5872	Item 4 - Alleged Father B	4.3564E09	99.9999%	NIST-STRBASE
87E42P-5877	Item 4 - Alleged Father B	1.2E11		NIST-STRBASE
8D2WB4-5877	Item 4 - Alleged Father B	260 million		NIST-STRBASE
8UZ9J6-5877	Item 4 - Alleged Father B	greater than 1 billion	99.999999999	Caucasian
9HP47G-5872	Item 4 - Alleged Father B	5203000000		NIST-STRBASE
9ZLNM2-5877	Item 4 - Alleged Father B	713,200,000	99.9999998598	NIST-STRBASE
ARBL22-5872	Item 4 - Alleged Father B	4.3564E09	99.9999%	NIST-STRBASE
BB2Y8D-5872	Item 4 - Alleged Father B			[Location Identifying Database]
BFAMKE-5877	Item 4 - Alleged Father B	13,611,000,000	99.999999993	NIST-STRBASE
BWXU2L-5877	Item 4 - Alleged Father B	13,090,000,000	99.999999992361	FBI PopStats
C68HBD-5877	Item 4 - Alleged Father B	88,284,335	99.9999%	NIST-STRBASE
C8D3YD-5872	Item 4 - Alleged Father B	1,000,000,000		FBI PopStats
CDHLGC-5877	Item 4 - Alleged Father B	1.2x10E11		NIST-STRBASE
CVHUHW-5872	Item 4 - Alleged Father B	3.0 billion	99.9999%	NIST-STRBASE
CXLRKC-5872	Item 4 - Alleged Father B	4.492E11	99.999999%	Local Database
D7VFXB-5877	Item 4 - Alleged Father B	257,700,000,000	99,999999999612	[Location Identifying Database]
DHTC2X-5872	Item 4 - Alleged Father B	8.22e14	99.9999999999999	NIST-STRBASE
DYD32W-5877	Item 4 - Alleged Father B	456,400,000	99.9999997809	FBI PopStats
E94TFC-5872	Item 4 - Alleged Father B	13.6 billion	99.9%	NIST-STRBASE
EKCQ6X-5872	Item 4 - Alleged Father B	4,356,479,709.6813	99.9999	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
EL8A8Y-5877	Item 4 - Alleged Father B	402,000,000	99.9999997512	FBI PopStats
EVTDDD-5872	Item 4 - Alleged Father B	3.449e11		NIST-STRBASE
EYTQUB-5872	Item 4 - Alleged Father B	4.35 billion	99.9%	NIST-STRBASE
F9XX9B-5877	Item 4 - Alleged Father B	1,52 x 10e11	more than 99,99999999%	STRidER
FEJQKB-5872	Item 4 - Alleged Father B			
FHP7ZU-5877	Item 4 - Alleged Father B	680 million		NIST-STRBASE
FHZ9LR-5872	Item 4 - Alleged Father B	3,000,000,000	99.9999	NIST-STRBASE
FJBB9Q-5872	Item 4 - Alleged Father B	3,000,000,000	99.9999%	NIST-STRBASE
G2AP7W-5877	Item 4 - Alleged Father B	402,000,000	99.9999997512%	FBI PopStats
G6UFUF-5872	Item 4 - Alleged Father B	4356479710	99.99	NIST-STRBASE
GMRY69-5877	Item 4 - Alleged Father B			FBI PopStats
HECFLA-5872	Item 4 - Alleged Father B	2.194 billion	99.99999995442%	FBI PopStats
HG4EZ8-5872	Item 4 - Alleged Father B	15,657,923,877	99.9999%	[Location Identifying Database]
HHCT38-5872	Item 4 - Alleged Father B	3685384930	99.99999997	NIST-STRBASE
JBCRH8-5872	Item 4 - Alleged Father B	65840000000	99.999999998481	FBI PopStats
JCHAHN-5872	Item 4 - Alleged Father B	713 million	99.9999998598	NIST-STRBASE
JGZCPU-5877	Item 4 - Alleged Father B			Laboratory Specific Database
JVJYW7-5872	Item 4 - Alleged Father B	approx. 5.2 billion		NIST-STRBASE
KNT4BT-5872	Item 4 - Alleged Father B	4363018657	99,99999998	NIST-STRBASE
L4ZMK6-5877	Item 4 - Alleged Father B	13,090,000,000	99.999999992361%	FBI PopStats
LCE87P-5877	Item 4 - Alleged Father B	456,400,000	99.9999997809	FBI PopStats

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
LCXADP-5872	Item 4 - Alleged Father B	4.3564E09	99.9999%	NIST-STRBASE
LZZCN6-5877	Item 4 - Alleged Father B			FBI PopStats
M6BRR2-5877	Item 4 - Alleged Father B	232783912510	99.999999999%	[Location Identifying Database]
M9CQ9L-5872	Item 4 - Alleged Father B	3.0 billion	99.9999%	NIST-STRBASE
MGLELJ-5872	Item 4 - Alleged Father B	3,000,000,000	99.9999%	NIST-STRBASE
MK3GTP-5877	Item 4 - Alleged Father B	12,546,440	99.99%	[Location Identifying Database]
MQ8KG3-5872	Item 4 - Alleged Father B	5.203E009		NIST-STRBASE
MVK7L3-5872	Item 4 - Alleged Father B	130,000,000,000,000,000, 000	99.999999999999999999	NIST-STRBASE, [Location Identifying Database]
MYJGG3-5872	Item 4 - Alleged Father B	10,128,224.471	99.99%	[Location Identifying Database]
N34FBJ-5877	Item 4 - Alleged Father B	107259140.41	99.9999990676785%	https://scispace.com/pdf/genetic-data-on-15-str-loci-in-the-caucasian-population-of-2ny0h2m3al.pdf
N4DX83-5872	Item 4 - Alleged Father B	2.56E9		NIST-STRBASE
NA47V3-5872	Item 4 - Alleged Father B	280,000,000	99.9999%	FBI PopStats, FBI Popstats NIST 2017
NRJEW3-5872	Item 4 - Alleged Father B	280,000,000	99.9999%	FBI PopStats, NIST Population
P6NZTZ-5877	Item 4 - Alleged Father B	110425319	99,99999909	[Location Identifying Database]
PUHDKZ-5872	Item 4 - Alleged Father B	283,000,000	99.9999%	FBI PopStats, FBI Popstats NIST 2017 data set
PYXLBL-5877	Item 4 - Alleged Father B	456,400,000	99.9999997809	FBI PopStats
Q8QDVK-5872	Item 4 - Alleged Father B	822160640500000	99,9999999999999	NIST-STRBASE
Q93U9X-5872	Item 4 - Alleged Father B	122844112018.373	99.999999991	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
RCYYJG-5877	Item 4 - Alleged Father B	260 million		NIST-STRBASE
T6DKW3-5877	Item 4 - Alleged Father B	402,000,000	99.9999997512	FBI PopStats
T76MGW-5872	Item 4 - Alleged Father B	181717476486400000000 0000.00	99.999999999999990	
TEJ6GJ-5872	Item 4 - Alleged Father B	4.3564E09	99.9999%	NIST-STRBASE
TMDABK-5877	Item 4 - Alleged Father B			
TZGZPX-5872	Item 4 - Alleged Father B	280,000,000	99.9999%	FBI PopStats
U8QRNU-5872	Item 4 - Alleged Father B	9.12E13	99.999999999999%	NIST-STRBASE
UBUHYF-5872	Item 4 - Alleged Father B	2,194,000,000	99.99999995442	FBI PopStats
ULB7RT-5872	Item 4 - Alleged Father B	4357531000	99.99999998%	NIST-STRBASE
UPBHNT-5872	Item 4 - Alleged Father B	2,165,715,514.98	99.99%	FBI PopStats
UX6LVW-5872	Item 4 - Alleged Father B	280,000,000	99.9999%	FBI PopStats, NIST Population
VE9GNU-5872	Item 4 - Alleged Father B	13.6 billion	99.9%	NIST-STRBASE
VP93WE-5877	Item 4 - Alleged Father B	456,400,000	99.9999997809	FBI PopStats
VYHDND-5877	Item 4 - Alleged Father B	260,000,000		NIST-STRBASE
W7B6AC-5877	Item 4 - Alleged Father B	260 million		NIST-STRBASE
WAAF6C-5877	Item 4 - Alleged Father B	260 million		NIST-STRBASE
WDUAZR-5872	Item 4 - Alleged Father B	4.35 billion	99.9%	NIST-STRBASE
WDWZBG-5872	Item 4 - Alleged Father B	4,356,479,709.6813	99.9999%	NIST-STRBASE
WLND9V-5872	Item 4 - Alleged Father B	1,336,000,000	Greater than 99.99%	FBI PopStats
WVCACG-5877	Item 4 - Alleged Father B			
Y2RT8T-5872	Item 4 - Alleged Father B	1.336 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
Y782XD-5872	Item 4 - Alleged Father B	4.3564E09	99.9999%	NIST-STRBASE
YMBV4D-5872	Item 4 - Alleged Father B	12,546,438	99.999992%	Caucasian (Identifiler)
Z7ZGGN-5877	Item 4 - Alleged Father B	2.558 billion	99.9999%	NIST-STRBASE
Z9Q6YB-5877	Item 4 - Alleged Father B	4.089E11	99.99%	Globalfiler Population Database (African American)
Z9QHKQ-5872	Item 4 - Alleged Father B	8.715622320796012E15	99.999999999999889%	local database

Paternity DNA Statistics Response Summary		Participants: 105
<i>Which of the alleged fathers cannot be excluded as the biological parent of Item 2?</i>		
Responses	Item 3 - Alleged Father A	0
	Item 4 - Alleged Father B	105
	Inconclusive	0
	No Response	0

Kinship Likelihood Ratio Results

TABLE 6

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D1S1656	26MY2N-5872	$(1+2p)/4p$	$p=13$	2.6853
	3NA8CP-5872	$(1+2p)/(4p)$	$p = 13$	2.6853
	48HUE9-5872	$(1+2p)/4p$	$p=13$	2.6853
	77ZHP3-5872	$(1+2p)/4p$	$p = 13$	2.6853
	79BAXH-5877	$(1+2p)/4p$	$p=13$	2.6853
	79RJT6-5872	$(1+2p)/4p$	$p=13$	2.6853
	7AM2U7-5872	$(1+2p)/(4p)$	$p=13$	2.6853
	7EBBY6-5877	$(1+2p)/(4p)$	$p=13$	2.685
	7FP7MP-5872	$(1+2p)/4p$	$p=13$	2.685314685
	7GMQT7-5872			2.6853
	7Q8TU6-5872	$(1+2p)/4p$	$p=13$	2.6853
	8D2WB4-5877	*	*	2.415
	ARBL22-5872	$(1+2p)/4p$	$p=13$	2.6853
	BFAMKE-5877	$(1+2*P)/(4*P)$	$P= 13$	2.685
	BWXU2L-5877	$(1+2p)/4p$	$p=13$	2.6853
	CXLRKC-5872	$(1+2p)/4p$	$p=13$	2.6853
	D7VFXB-5877	$(1+2p)/4p$	$p=13$	2.6853
	DHTC2X-5872	$2p+1/4p$	$p:13$	2.685
	EKCQ6X-5872	$(1+2p)/4p$	$p=13$	2.6853
	FHP7ZU-5877			2.415
	G6UFUF-5872	$(1+2a)/4a$	$A=13$	2.685
	HG4EZ8-5872	$(1+4p)/8p$	$p = 13$	2.685
	LCXADP-5872	$(1+2p)/4p$	$p=13$	2.6853
	M6BRR2-5877	$(1+2p)/4p$	$p=13$	2.685
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$P=13$	2.685
	Q8QDVK-5872	$(2a+1)/4a$	$a=13$	2.69
	Q93U9X-5872	$(1+2p)/4p$	$p = 13$	2.6853
	RCYYJG-5877	*	*	2.415
	T76MGW-5872	$(1+2p)/4p$	$p=13$	2.6853
	TEJ6GJ-5872	$(1+2p)/4p$	$p=13$	2.6853
	U8QRNU-5872	$(1+2a)/4a$	$a = 13$	2.685
	ULB7RT-5872	$(1+2p)/4p$	$p=13$	2.6852
	UPBHNT-5872	$(1+2p)/4p$	$p=13$	2.69
	VYHDND-5877			2.415

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D1S1656	W7B6AC-5877	*	*	2.415
	WAAF6C-5877			2.415
	WDWZBG-5872	$(1+2p)/4p$	$p=13$	2.685
	WLND9V-5872	$(1+2p)/4p$	$p=13$	2.6853
	Y2RT8T-5872	$(1+2p)/(4p)$	$p=13$	2.6853
	Y782XD-5872	$(1+2p)/4p$	$p=13$	2.6853
	Z7ZGGN-5877	$(1+2p)/4p$	$p=13$	2.6853
	Z9Q6YB-5877	$(1+4p)/8p$	$P=13$	1.5927
	Z9QHKQ-5872	$(1+2p)/4p$	$p=13$	2.685314685
Statistical Analysis Summary of D1S1656			Likelihood Ratio Mode:	2.6853

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S1338	26MY2N-5872	1/2		0.5000
	3NA8CP-5872	2/4		0.50000
	48HUE9-5872	0.5		0.5
	77ZHP3-5872	2/4		0.5000
	79BAXH-5877	0.5		0.5
	79RJT6-5872	1/2		0.5000
	7AM2U7-5872	1/2		0.5
	7EBBY6-5877	2/4		0.5
	7FP7MP-5872	2/4		0.5
	7GMQT7-5872			0.5000
	7Q8TU6-5872	1/2		0.5000
	8D2WB4-5877	*	*	0.5000
	ARBL22-5872	1/2		0.5000
	BFAMKE-5877	1/2		0.5000
	BWXU2L-5877	1/2		0.5
	CXLRKC-5872	1/2		0.5
	D7VFXB-5877	2/4		0.5000
	DHTC2X-5872	pq/2pq	p:18 q:23	0.5
	EKCQ6X-5872	1/2		0.5000
	FHP7ZU-5877			0.5000
	G6UFUF-5872			0.5000
	HG4EZ8-5872			0.5
	LCXADP-5872	1/2		0.5000
	M6BRR2-5877	0.5		0.5000
	N34FBJ-5877	$LR = (0.25 + 0) / P_i * P_j$	p=0	24.509
	Q8QDVK-5872	1/2		0.50
	Q93U9X-5872	1/2		0.5
	RCYYJG-5877	*	*	0.5000
	T76MGW-5872	2/4		0.5
	TEJ6GJ-5872	1/2		0.5000
	U8QRNU-5872	1/2		0.5000
	ULB7RT-5872	1/2		0.5000
	UPBHNT-5872	1/2		0.5
	VYHDND-5877			0.5000
	W7B6AC-5877	*	*	0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S1338	WAAF6C-5877			0.5
	WDWZBG-5872	1/2		0.5000
	WLND9V-5872	1/2		0.50000
	Y2RT8T-5872	(2/4)		0.5000
	Y782XD-5872	1/2		0.5000
	Z7ZGGN-5877	1/2		0.5000
	Z9Q6YB-5877			0.0001
	Z9QHKQ-5872			0.5
Statistical Analysis Summary of D2S1338			Likelihood Ratio Mode:	0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S441	26MY2N-5872	1/2		0.5000
	3NA8CP-5872	2/4		0.50000
	48HUE9-5872	0.5		0.5
	77ZHP3-5872	2/4		0.5000
	79BAXH-5877	0.5		0.5
	79RJT6-5872	1/2		0.5000
	7AM2U7-5872	1/2		0.5
	7EBBY6-5877	2/4		0.5
	7FP7MP-5872	2/4		0.5
	7GMQT7-5872			0.5000
	7Q8TU6-5872	1/2		0.5000
	8D2WB4-5877	*	*	0.5000
	ARBL22-5872	1/2		0.5000
	BFAMKE-5877	1/2		0.5000
	BWXU2L-5877	1/2		0.5
	CXLRKC-5872	1/2		0.5
	D7VFXB-5877	2/4		0.5000
	DHTC2X-5872	pq/2pq	p: 10 q: 12	0.5
	EKCQ6X-5872	1/2		0.5000
	FHP7ZU-5877			0.5000
	G6UFUF-5872			0.5000
	HG4EZ8-5872			0.5
	LCXADP-5872	1/2		0.5000
	M6BRR2-5877	0.5		0.5000
	N34FBJ-5877	$LR = (0.25 + 0) / P_i * P_j$	p=0	2.485
	Q8QDVK-5872	1/2		0.50
	Q93U9X-5872	1/2		0.5
	RCYYJG-5877	*	*	0.5000
	T76MGW-5872	2/4		0.5
	TEJ6GJ-5872	1/2		0.5000
	U8QRNU-5872	1/2		0.5000
	ULB7RT-5872	1/2		0.5000
	UPBHNT-5872	1/2		0.5
	VYHDND-5877			0.5000
	W7B6AC-5877	*	*	0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S441	WAAF6C-5877			0.5
	WDWZBG-5872	1/2		0.5000
	WLND9V-5872	1/2		0.50000
	Y2RT8T-5872	(2/4)		0.5000
	Y782XD-5872	1/2		0.5000
	Z7ZGGN-5877	1/2		0.5000
	Z9Q6YB-5877			0.0001
	Z9QHKQ-5872			0.5
Statistical Analysis Summary of D2S441			Likelihood Ratio Mode:	0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D3S1358	26MY2N-5872	$(1 + 4p)/8p$	$p=17$	1.1782
	3NA8CP-5872	$(1 + 4p)/(8p)$	$p = 17$	1.1782
	48HUE9-5872	$(1 + 4p)/8p$	$p=17$	1.1782
	77ZHP3-5872	$(1 + 4p)/8p$	$p = 17$	1.1782
	79BAXH-5877	$(1 + 4p)/8p$	$p=17$	1.1782
	79RJT6-5872	$(1 + 4r)/8r$	$r=17$	1.1782
	7AM2U7-5872	$(1 + 4q)/(8q)$	$q=17$	1.1782
	7EBBY6-5877	$(1 + 4p)/(8p)$	$p=17$	1.178
	7FP7MP-5872	$(1 + 4p)/8p$	$p=17$	1.178241997
	7GMQT7-5872			1.1782
	7Q8TU6-5872	$(1 + 4r)/8r$	$r=17$	1.1782
	8D2WB4-5877	*	*	1.163
	ARBL22-5872	$(1 + 4r)/8r$	$r=17$	1.1782
	BFAMKE-5877	$(1 + 4 \cdot R)/(8 \cdot R)$	$R= 17$	1.178
	BWXU2L-5877	$(1 + 4p)/8p$	$p=17$	1.1782
	CXLRKC-5872	$(1 + 4p)/8p$	$p=17$	1.1782
	D7VFXB-5877	$(1 + 4p)/8p$	$p=17$	1.1782
	DHTC2X-5872	$4p+1/8p$	$p: 17$	1.178
	EKCQ6X-5872	$(1 + 4q)/8q$	$q=17$	1.1782
	FHP7ZU-5877			1.163
	G6UFUF-5872	$(1 + 4a)/8a$	$A=17$	1.178
	HG4EZ8-5872	$(1 + 4p)/8p$	$p = 17$	1.178
	LCXADP-5872	$(1 + 4r)/8r$	$r=17$	1.1782
	M6BRR2-5877	$(1 + 4p)/8p$	$p=17$	1.178
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=17$	1.856
	Q8QDVK-5872	$(4a+1)/8a$	$a=17$	1.18
	Q93U9X-5872	$(1 + 4p)/8p$	$p = 17$	1.1782
	RCYYJG-5877	*	*	1.163
	T76MGW-5872	$(1 + 4p)/8p$	$p=17$	1.1782
	TEJ6GJ-5872	$(1 + 4r)/8r$	$r=17$	1.1782
	U8QRNU-5872	$(1 + 4a)/8a$	$a = 17$	1.178
	ULB7RT-5872	$(1 + 4r)/8r$	$r=17$	1.1782
	UPBHNT-5872	$(1 + 4p)/8p$	$p=17$	1.18
	VYHDND-5877			1.163
	W7B6AC-5877	*	*	1.163

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D3S1358	WAAF6C-5877			1.163
	WDWZBG-5872	$(1 + 4r)/8r$	$r=17$	1.178
	WLND9V-5872	$(1 + 4p)/8p$	$p=17$	1.1782
	Y2RT8T-5872	$(1 + 4p)/(8p)$	$p=17$	1.1782
	Y782XD-5872	$(1 + 4r)/8r$	$r=17$	1.1782
	Z7ZGGN-5877	$(1 + 4q)/8q$	$q=17$	1.1782
	Z9Q6YB-5877	$(1 + 4p)/8p$	$P=17$	1.1782
	Z9QHKQ-5872	$(1 + 4p)/8p$	$p=17$	1.178241997
Statistical Analysis Summary of D3S1358			Likelihood Ratio Mode:	1.1782

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D5S818	26MY2N-5872	$(1+2p)/4p$	$p=11$	1.1414
	3NA8CP-5872	$(1+2p)/(4p)$	$p = 11$	1.1414
	48HUE9-5872	$(1+2p)/4p$	$p=11$	1.1413
	77ZHP3-5872	$(1+2p)/4p$	$p = 11$	1.1414
	79BAXH-5877	$(1+2p)/4p$	$p=11$	1.1414
	79RJT6-5872	$(1+2p)/4p$	$p=11$	1.1413
	7AM2U7-5872	$(1+2p)/(4p)$	$p=11$	1.1414
	7EBBY6-5877	$(1+2p)/(4p)$	$p=11$	1.141
	7FP7MP-5872	$(1+2p)/4p$	$p=11$	1.141354541
	7GMQT7-5872			1.1414
	7Q8TU6-5872	$(1+2p)/4p$	$p=11$	1.1413
	8D2WB4-5877	*	*	1.129
	ARBL22-5872	$(1+2p)/4p$	$p=11$	1.1413
	BFAMKE-5877	$(1+2*P)/(4*P)$	$P= 11$	1.141
	BWXU2L-5877	$(1+2p)/4p$	$p=11$	1.1414
	CXLRKC-5872	$(1+2p)/4p$	$p=11$	1.1414
	D7VFXB-5877	$(1+2p)/4p$	$p=11$	1.1414
	DHTC2X-5872	$2p+1/4p$	$p: 11$	1.141
	EKCQ6X-5872	$(1+2p)/4p$	$p=11$	1.1414
	FHP7ZU-5877			1.129
	G6UFUF-5872	$(1+2a)/4a$	$A=11$	1.141
	HG4EZ8-5872	$(1+4p)/8p$	$p = 11$	1.141
	LCXADP-5872	$(1+2p)/4p$	$p=11$	1.1413
	M6BRR2-5877	$(1+2p)/4p$	$p=11$	1.141
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=11$	1.141
	Q8QDVK-5872	$(2a+1)/4a$	$a=11$	1.14
	Q93U9X-5872	$(1+2p)/4p$	$p = 11$	1.1414
	RCYYJG-5877	*	*	1.129
	T76MGW-5872	$(1+2p)/4p$	$p=11$	1.1414
	TEJ6GJ-5872	$(1+2p)/4p$	$p=11$	1.1413
	U8QRNU-5872	$(1+2a)/4a$	$a = 11$	1.141
	ULB7RT-5872	$(1+2p)/4p$	$p=11$	1.1413
	UPBHNT-5872	$(1+2p)/4p$	$p=11$	1.14
	VYHDND-5877			1.129
	W7B6AC-5877	*	*	1.129

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D5S818	WAAF6C-5877			1.129
	WDWZBG-5872	$(1+2p)/4p$	$p=11$	1.141
	WLND9V-5872	$(1+2p)/4p$	$p=11$	1.1414
	Y2RT8T-5872	$(1+2p)/(4p)$	$p=11$	1.1414
	Y782XD-5872	$(1+2p)/4p$	$p=11$	1.1413
	Z7ZGGN-5877	$(1+2p)/4p$	$p=11$	1.1414
	Z9Q6YB-5877	$(1+4p)/8p$	$P=11$	0.8207
	Z9QHKQ-5872	$(1+2p)/4p$	$p=11$	1.141354541
Statistical Analysis Summary of D5S818			Likelihood Ratio Mode:	1.1414

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D7S820	26MY2N-5872	$(1 + 4p)/8p$	$p=9$	1.8721
	3NA8CP-5872	$(1 + 4p)/(8p)$	$p = 9$	1.8721
	48HUE9-5872	$(1 + 4p)/8p$	$p=9$	1.8721
	77ZHP3-5872	$(1 + 4p)/8p$	$p = 9$	1.8721
	79BAXH-5877	$(1 + 4p)/8p$	$p=9$	1.8721
	79RJT6-5872	$(1 + 4q)/8q$	$q=9$	1.8721
	7AM2U7-5872	$(1 + 4q)/(8q)$	$q=9$	1.8721
	7EBBY6-5877	$(1 + 4p)/(8p)$	$p=9$	1.872
	7FP7MP-5872	$(1 + 4p)/8p$	$p=9$	1.872118551
	7GMQT7-5872			1.8721
	7Q8TU6-5872	$(1 + 4q)/8q$	$q=9$	1.8721
	8D2WB4-5877	*	*	1.772
	ARBL22-5872	$(1 + 4q)/8q$	$q=9$	1.8721
	BFAMKE-5877	$(1 + 4*Q)/(8*Q)$	$Q= 9$	1.872
	BWXU2L-5877	$(1 + 4p)/8p$	$p=9$	1.8721
	CXLRKC-5872	$(1 + 4p)/8p$	$p=9$	1.8721
	D7VFXB-5877	$(1 + 4p)/8p$	$p=9$	1.8721
	DHTC2X-5872	$4p+1/8p$	$p: 9$	1.872
	EKCQ6X-5872	$(1 + 4q)/8q$	$q=9$	1.8721
	FHP7ZU-5877			1.772
	G6UFUF-5872	$(1 + 4a)/8a$	$A=9$	1.872
	HG4EZ8-5872	$(1 + 4p)/8p$	$p = 9$	1.872
	LCXADP-5872	$(1 + 4q)/8q$	$q=9$	1.8721
	M6BRR2-5877	$(1 + 4p)/8p$	$p=9$	1.872
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=9$	3.244
	Q8QDVK-5872	$(4a+1)/8a$	$a=9$	1.87
	Q93U9X-5872	$(1 + 4p)/8p$	$p = 9$	1.8721
	RCYYJG-5877	*	*	1.772
	T76MGW-5872	$(1 + 4p)/8p$	$p=9$	1.8721
	TEJ6GJ-5872	$(1 + 4q)/8q$	$q=9$	1.8721
	U8QRNU-5872	$(1 + 4a)/8a$	$a = 9$	1.872
	ULB7RT-5872	$(1 + 4q)/8q$	$q=9$	1.8721
	UPBHNT-5872	$(1 + 4p)/8p$	$p=9$	1.87
	VYHDND-5877			1.772
	W7B6AC-5877	*	*	1.772

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D7S820	WAAF6C-5877			1.772
	WDWZBG-5872	$(1 + 4r)/8r$	$r=9$	1.872
	WLND9V-5872	$(1 + 4p)/8p$	$p=9$	1.8721
	Y2RT8T-5872	$(1 + 4p)/(8p)$	$p=9$	1.8721
	Y782XD-5872	$(1 + 4q)/8q$	$q=9$	1.8721
	Z7ZGGN-5877	$(1 + 4q)/8q$	$q=9$	1.8721
	Z9Q6YB-5877	$(1 + 4p)/8p$	$P=9$	1.8721
	Z9QHKQ-5872	$(1 + 4p)/8p$	$p=9$	1.872118551
Statistical Analysis Summary of D7S820			Likelihood Ratio Mode:	1.8721

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D8S1179	26MY2N-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	3NA8CP-5872	$(1 + 4p)/(8p)$	$p = 10$	1.8412
	48HUE9-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	77ZHP3-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	79BAXH-5877	$(1 + 4p)/8p$	$p = 10$	1.8412
	79RJT6-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	7AM2U7-5872	$(1 + 4p)/(8p)$	$p = 10$	1.8412
	7EBBY6-5877	$(1 + 4p)/(8p)$	$p = 10$	1.841
	7FP7MP-5872	$(1 + 4p)/8p$	$p = 10$	1.841201717
	7GMQT7-5872			1.8412
	7Q8TU6-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	8D2WB4-5877	*	*	1.747
	ARBL22-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	BFAMKE-5877	$(1 + 4 * P)/(8 * P)$	$P = 10$	1.841
	BWXU2L-5877	$(1 + 4p)/8p$	$p = 10$	1.8412
	CXLRKC-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	D7VFXB-5877	$(1 + 4p)/8p$	$p = 10$	1.8412
	DHTC2X-5872	$4p + 1/8p$	$p: 10$	1.841
	EKCQ6X-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	FHP7ZU-5877			1.747
	G6UFUF-5872	$(1 + 4a)/8a$	$A = 10$	1.841
	HG4EZ8-5872	$(1 + 4p)/8p$	$p = 10$	1.841
	LCXADP-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	M6BRR2-5877	$(1 + 4p)/8p$	$p = 10$	1.841
	N34FBJ-5877	$LR = (0.25 + 0.5p)/p$	$p = 10$	3.182
	Q8QDVK-5872	$(4a + 1)/8a$	$a = 10$	1.84
	Q93U9X-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	RCYYJG-5877	*	*	1.747
	T76MGW-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	TEJ6GJ-5872	$(1 + 4p)/8p$	$p = 10$	1.8412
	U8QRNU-5872	$(1 + 4a)/8a$	$a = 10$	1.841
	ULB7RT-5872	$(1 + 4p)/8p$	$p = 10$	1.8409
	UPBHNT-5872	$(1 + 4p)/8p$	$p = 10$	1.84
	VYHDND-5877			1.747
	W7B6AC-5877	*	*	1.747

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D8S1179	WAAF6C-5877			1.747
	WDWZBG-5872	$(1 + 4p)/8p$	$p=10$	1.841
	WLND9V-5872	$(1 + 4p)/8p$	$p=10$	1.8412
	Y2RT8T-5872	$(1 + 4p)/(8p)$	$p=10$	1.8412
	Y782XD-5872	$(1 + 4p)/8p$	$p=10$	1.8412
	Z7ZGGN-5877	$(1 + 4p)/8p$	$p=10$	1.8412
	Z9Q6YB-5877	$(1 + 4p)/8p$	$P=10$	1.8412
	Z9QHKQ-5872	$(1 + 4p)/8p$	$p=10$	1.841201717
Statistical Analysis Summary of D8S1179			Likelihood Ratio Mode:	1.8412

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D10S1248	26MY2N-5872	$(1+2p)/4p$	$p=13$	1.4147
	3NA8CP-5872	$(1+2p)/(4p)$	$p = 13$	1.4147
	48HUE9-5872	$(1+2p)/4p$	$p=13$	1.4147
	77ZHP3-5872	$(1+2p)/4p$	$p = 13$	1.4147
	79BAXH-5877	$(1+2p)/4p$	$p=13$	1.4147
	79RJT6-5872	$(1+2p)/4p$	$p=13$	1.4147
	7AM2U7-5872	$(1+2p)/(4p)$	$p=13$	1.4147
	7EBBY6-5877	$(1+2p)/(4p)$	$p=13$	1.415
	7FP7MP-5872	$(1+2p)/4p$	$p=13$	1.414745701
	7GMQT7-5872			1.4147
	7Q8TU6-5872	$(1+2p)/4p$	$p=13$	1.4147
	8D2WB4-5877	*	*	1.379
	ARBL22-5872	$(1+2p)/4p$	$p=13$	1.4147
	BFAMKE-5877	$(1+2*P)/(4*P)$	$P= 13$	1.415
	BWXU2L-5877	$(1+2p)/4p$	$p=13$	1.4147
	CXLRKC-5872	$(1+2p)/4p$	$p=13$	1.4148
	D7VFXB-5877	$(1+2p)/4p$	$p=13$	1.4147
	DHTC2X-5872	$2p+1/4p$	$p: 13$	1.415
	EKCQ6X-5872	$(1+2p)/4p$	$p=13$	1.4147
	FHP7ZU-5877			1.379
	G6UFUF-5872	$(1+2a)/4a$	$A=13$	1.415
	HG4EZ8-5872	$(1+4p)/8p$	$p = 13$	1.415
	LCXADP-5872	$(1+2p)/4p$	$p=13$	1.4147
	M6BRR2-5877	$(1+2p)/4p$	$p=13$	1.415
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=13$	1.414
	Q8QDVK-5872	$(2a+1)/4a$	$a=13$	1.41
	Q93U9X-5872	$(1+2p)/4p$	$p = 13$	1.4147
	RCYYJG-5877	*	*	1.379
	T76MGW-5872	$(1+2p)/4p$	$p=13$	1.4147
	TEJ6GJ-5872	$(1+2p)/4p$	$p=13$	1.4147
	U8QRNU-5872	$(1+2a)/4a$	$a = 13$	1.415
	ULB7RT-5872	$(1+2p)/4p$	$p=13$	1.4147
	UPBHNT-5872	$(1+2p)/4p$	$p=13$	1.42
	VYHDND-5877			1.379
	W7B6AC-5877	*	*	1.379

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D10S1248	WAAF6C-5877			1.379
	WDWZBG-5872	$(1+2p)/4p$	$p=13$	1.415
	WLND9V-5872	$(1+2p)/4p$	$p=13$	1.4147
	Y2RT8T-5872	$(1+2p)/(4p)$	$p=13$	1.4147
	Y782XD-5872	$(1+2p)/4p$	$p=13$	1.4147
	Z7ZGGN-5877	$(1+2p)/4p$	$p=13$	1.4147
	Z9Q6YB-5877	$(1+4p)/8p$	$P=13$	0.9574
	Z9QHKQ-5872	$(1+2p)/4p$	$p=13$	1.414745701
Statistical Analysis Summary of D10S1248			Likelihood Ratio Mode:	1.4147

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D12S391	26MY2N-5872	$(1+2p)/4p$	$p=20$	2.1160
	3NA8CP-5872	$(1+2p)/(4p)$	$p = 20$	2.1160
	48HUE9-5872	$(1+2p)/4p$	$p=20$	2.1160
	79BAXH-5877	$(1+2p)/4p$	$p=20$	2.1160
	79RJT6-5872	$(1+2r)/4r$	$r=20$	2.1160
	7AM2U7-5872	$(1+2p)/(4p)$	$p=20$	2.1160
	7EBBY6-5877	$(1+2p)/(4p)$	$p=20$	2.116
	7FP7MP-5872	$(1+2p)/4p$	$p=20$	2.116031028
	7GMQT7-5872			2.1160
	7Q8TU6-5872	$(1+2r)/4r$	$r=20$	2.1160
	8D2WB4-5877	*	*	
	ARBL22-5872	$(1+2r)/4r$	$r=20$	2.1160
	BFAMKE-5877	$(1+2*Q)/(4*Q)$	$Q= 20$	2.116
	BWXU2L-5877	$(1+2p)/4p$	$p=20$	2.116
	CXLRKC-5872	$(1+2p)/4p$	$p=20$	2.1160
	D7VFXB-5877	$(1+2p)/4p$	$p=20$	2.1160
	DHTC2X-5872	$2p+1/4p$	$p: 20$	2.116
	EKCQ6X-5872	$(1+2p)/4p$	$p=20$	2.1160
	FHP7ZU-5877			1.975
	G6UFUF-5872	$(1+2a)/4a$	$A=20$	2.116
	HG4EZ8-5872	$(1+4p)/8p$	$p = 20$	2.116
	LCXADP-5872	$(1+2r)/4r$	$r=20$	2.1160
	M6BRR2-5877	$(1+2p)/4p$	$p=20$	2.116
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=20$	2.116
	Q8QDVK-5872	$(2a+1)/4a$	$a=20$	2.12
	Q93U9X-5872	$(1+2p)/4p$	$p = 20$	2.1160
	RCYYJG-5877	*	*	
	T76MGW-5872	$(1+2p)/4p$	$p=20$	2.1160
	TEJ6GJ-5872	$(1+2r)/4r$	$r=20$	2.1160
	U8QRNU-5872	$(1+2a)/4a$	$a = 20$	2.116
	ULB7RT-5872	$(1+2r)/4r$	$r=20$	2.1164
	UPBHNT-5872	$(1+2p)/4p$	$p=20$	2.12
	W7B6AC-5877	*	*	
	WAAF6C-5877		omitted	
	WDWZBG-5872	$(1+2q)/4q$	$q=20$	2.116

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D12S391	WLND9V-5872	$(1 + 2p)/4p$	$p=20$	2.1160
	Y2RT8T-5872	$(1 + 2p)/(4p)$	$p=20$	2.1160
	Y782XD-5872	$(1 + 2r)/4r$	$r=20$	2.1160
	Z7ZGGN-5877	$(1 + 2p)/4p$	$p=20$	2.1160
	Z9Q6YB-5877	$(1 + 4p)/8p$	$P=20$	1.3080
	Z9QHKQ-5872	$(1 + 2p)/4p$	$p=20$	2.116031028
Statistical Analysis Summary of D12S391			Likelihood Ratio Mode:	2.1160

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D13S317	26MY2N-5872	1/2		0.5000
	3NA8CP-5872	2/4		0.50000
	48HUE9-5872	0.5		0.5
	77ZHP3-5872	2/4		0.5000
	79BAXH-5877	0.5		0.5
	79RJT6-5872	1/2		0.5000
	7AM2U7-5872	1/2		0.5
	7EBBY6-5877	2/4		0.5
	7FP7MP-5872	2/4		0.5
	7GMQT7-5872			0.5000
	7Q8TU6-5872	1/2		0.5000
	8D2WB4-5877	*	*	0.5000
	ARBL22-5872	1/2		0.5000
	BFAMKE-5877	1/2		0.500
	BWXU2L-5877	1/2		0.5
	CXLRKC-5872	1/2		0.5
	D7VFXB-5877	2/4		0.5000
	DHTC2X-5872	pq/2pq	p: 9 q: 13	0.5
	EKCQ6X-5872	1/2		0.5000
	FHP7ZU-5877			0.5000
	G6UFUF-5872			0.5000
	HG4EZ8-5872			0.5
	LCXADP-5872	1/2		0.5000
	M6BRR2-5877	0.5		0.5000
	N34FBJ-5877	$LR = (0.25 + 0) / P_i * P_j$	p=0	6.443
	Q8QDVK-5872	1/2		0.50
	Q93U9X-5872	1/2		0.5
	RCYYJG-5877	*	*	0.5000
	T76MGW-5872	2/4		0.5
	TEJ6GJ-5872	1/2		0.5000
	U8QRNU-5872	1/2		0.5000
	ULB7RT-5872	1/2		0.5000
	UPBHNT-5872	1/2		0.5
	VYHDND-5877			0.5000
	W7B6AC-5877	*	*	0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D13S317	WAAF6C-5877			0.5
	WDWZBG-5872	1/2		0.5000
	WLND9V-5872	1/2		0.50000
	Y2RT8T-5872	(2/4)		0.5000
	Y782XD-5872	1/2		0.5000
	Z7ZGGN-5877	1/2		0.5000
	Z9Q6YB-5877			0.0001
	Z9QHKQ-5872			0.5
Statistical Analysis Summary of D13S317				Likelihood Ratio Mode: 0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D16S539	26MY2N-5872	$(1 + 4p)/8p$	$p=11$	0.9721
	3NA8CP-5872	$(1 + 4p)/(8p)$	$p = 11$	0.97205
	48HUE9-5872	$(1 + 4p)/8p$	$p=11$	0.9720
	77ZHP3-5872	$(1 + 4p)/8p$	$p = 11$	0.9721
	79BAXH-5877	$(1 + 4p)/8p$	$p=11$	0.9721
	79RJT6-5872	$(1 + 4r)/8r$	$r=11$	0.9720
	7AM2U7-5872	$(1 + 4q)/(8q)$	$q=11$	0.9721
	7EBBY6-5877	$(1 + 4p)/(8p)$	$p=11$	0.972
	7FP7MP-5872	$(1 + 4p)/8p$	$p=11$	0.972054381
	7GMQT7-5872			0.9721
	7Q8TU6-5872	$(1 + 4r)/8r$	$r=11$	0.9720
	8D2WB4-5877	*	*	0.9689
	ARBL22-5872	$(1 + 4r)/8r$	$r=11$	0.9720
	BFAMKE-5877	$(1 + 4 \cdot R)/(8 \cdot R)$	$R = 11$	0.9721
	BWXU2L-5877	$(1 + 4p)/8p$	$p=11$	0.97205
	CXLRKC-5872	$(1 + 4p)/8p$	$p=11$	0.9721
	D7VFXB-5877	$(1 + 4p)/8p$	$p=11$	0.97205
	DHTC2X-5872	$4p+1/8p$	$p: 11$	0.972
	EKCQ6X-5872	$(1 + 4q)/8q$	$q=11$	0.9721
	FHP7ZU-5877			0.9689
	G6UFUF-5872	$(1 + 4a)/8a$	$A=11$	0.9721
	HG4EZ8-5872	$(1 + 4p)/8p$	$p = 11$	0.9721
	LCXADP-5872	$(1 + 4r)/8r$	$r=11$	0.9720
	M6BRR2-5877	$(1 + 4p)/8p$	$p=11$	0.9721
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=11$	1.444
	Q8QDVK-5872	$(4a+1)/8a$	$a=11$	0.97
	Q93U9X-5872	$(1 + 4p)/8p$	$p = 11$	0.9721
	RCYYJG-5877	*	*	0.9689
	T76MGW-5872	$(1 + 4p)/8p$	$p=11$	0.9721
	TEJ6GJ-5872	$(1 + 4r)/8r$	$r=11$	0.9720
	U8QRNU-5872	$(1 + 4a)/8a$	$a = 11$	0.9720
	ULB7RT-5872	$(1 + 4r)/8r$	$r=11$	0.9720
	UPBHNT-5872	$(1 + 4p)/8p$	$p=11$	0.972
	VYHDND-5877			0.9689
	W7B6AC-5877	*	*	0.9689

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D16S539	WAAF6C-5877			0.9689
	WDWZBG-5872	$(1 + 4q)/8q$	$q=11$	0.9721
	WLND9V-5872	$(1 + 4p)/8p$	$p=11$	0.97205
	Y2RT8T-5872	$(1 + 4p)/(8p)$	$p=11$	0.9721
	Y782XD-5872	$(1 + 4r)/8r$	$r=11$	0.9720
	Z7ZGGN-5877	$(1 + 4q)/8q$	$q=11$	0.9721
	Z9Q6YB-5877	$(1 + 4p)/8p$	$P=11$	0.9721
	Z9QHKQ-5872	$(1 + 4p)/8p$	$p=11$	0.97205438
Statistical Analysis Summary of D16S539			Likelihood Ratio Mode:	0.9721

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D18S51	26MY2N-5872	$(1 + 4p)/8p$	$p = 19$	3.1824
	3NA8CP-5872	$(1 + 4p)/(8p)$	$p = 19$	3.1824
	48HUE9-5872	$(1 + 4p)/8p$	$p = 19$	3.1824
	77ZHP3-5872	$(1 + 4p)/8p$	$p = 19$	3.1824
	79BAXH-5877	$(1 + 4p)/8p$	$p = 19$	3.1824
	79RJT6-5872	$(1 + 4u)/8u$	$u = 19$	3.1824
	7AM2U7-5872	$(1 + 4q)/(8q)$	$q = 19$	3.1824
	7EBBY6-5877	$(1 + 4p)/(8p)$	$p = 19$	3.182
	7FP7MP-5872	$(1 + 4p)/8p$	$p = 19$	3.182403433
	7GMQT7-5872			3.1824
	7Q8TU6-5872	$(1 + 4u)/8u$	$u = 19$	3.1824
	8D2WB4-5877	*	*	2.769
	ARBL22-5872	$(1 + 4u)/8u$	$u = 19$	3.1824
	BFAMKE-5877	$(1 + 4 \cdot R)/(8 \cdot R)$	$R = 19$	3.182
	BWXU2L-5877	$(1 + 4p)/8p$	$p = 19$	3.1824
	CXLRKC-5872	$(1 + 4p)/8p$	$p = 19$	3.1824
	D7VFXB-5877	$(1 + 4p)/8p$	$p = 19$	3.1824
	DHTC2X-5872	$4p + 1/8p$	$p = 19$	3.182
	EKCQ6X-5872	$(1 + 4q)/8q$	$q = 19$	3.1824
	FHP7ZU-5877			2.769
	G6UFUF-5872	$(1 + 4a)/8a$	$A = 19$	3.182
	HG4EZ8-5872	$(1 + 4p)/8p$	$p = 19$	3.182
	LCXADP-5872	$(1 + 4u)/8u$	$u = 19$	3.1824
	M6BRR2-5877	$(1 + 4p)/8p$	$p = 19$	3.182
	N34FBJ-5877	$LR = (0.25 + 0.5p)/p$	$p = 19$	5.864
	Q8QDVK-5872	$(4a + 1)/8a$	$a = 19$	3.18
	Q93U9X-5872	$(1 + 4p)/8p$	$p = 19$	3.1824
	RCYYJG-5877	*	*	2.769
	T76MGW-5872	$(1 + 4p)/8p$	$p = 19$	3.1824
	TEJ6GJ-5872	$(1 + 4u)/8u$	$u = 19$	3.1824
	U8QRNU-5872	$(1 + 4a)/8a$	$a = 19$	3.182
	ULB7RT-5872	$(1 + 4u)/8u$	$u = 19$	3.1818
	UPBHNT-5872	$(1 + 4p)/8p$	$p = 19$	3.18
	VYHDND-5877			2.769
	W7B6AC-5877	*	*	2.769

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D18S51	WAAF6C-5877			2.769
	WDWZBG-5872	$(1 + 4r)/8r$	$r = 19$	3.182
	WLND9V-5872	$(1 + 4p)/8p$	$p = 19$	3.1824
	Y2RT8T-5872	$(1 + 4p)/(8p)$	$p = 19$	3.1824
	Y782XD-5872	$(1 + 4u)/8u$	$u = 19$	3.1824
	Z7ZGGN-5877	$(1 + 4q)/8q$	$q = 19$	3.1824
	Z9Q6YB-5877	$(1 + 4p)/8p$	$P = 19$	3.1824
	Z9QHKQ-5872	$(1 + 4p)/8p$	$p = 19$	3.182403433
Statistical Analysis Summary of D18S51			Likelihood Ratio Mode:	3.1824

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D19S433	26MY2N-5872	$(1 + 4p)/8p$	$p=15$	1.4218
	3NA8CP-5872	$(1 + 4p)/(8p)$	$p = 15$	1.4218
	48HUE9-5872	$(1 + 4p)/8p$	$p=15$	1.4218
	77ZHP3-5872	$(1 + 4p)/8p$	$p = 15$	1.4218
	79BAXH-5877	$(1 + 4p)/8p$	$p=15$	1.4218
	79RJT6-5872	$(1 + 4r)/8r$	$r=15$	1.4218
	7AM2U7-5872	$(1 + 4q)/(8q)$	$q=15$	1.4218
	7EBBY6-5877	$(1 + 4p)/(8p)$	$p=15$	1.422
	7FP7MP-5872	$(1 + 4p)/8p$	$p=15$	1.421828909
	7GMQT7-5872			1.4218
	7Q8TU6-5872	$(1 + 4r)/8r$	$r=15$	1.4218
	8D2WB4-5877	*	*	1.385
	ARBL22-5872	$(1 + 4r)/8r$	$r=15$	1.4218
	BFAMKE-5877	$(1 + 4 \cdot R)/(8 \cdot R)$	$R= 15$	1.422
	BWXU2L-5877	$(1 + 4p)/8p$	$p=15$	1.4218
	CXLRKC-5872	$(1 + 4p)/8p$	$p=15$	1.4218
	D7VFXB-5877	$(1 + 4p)/8p$	$p=15$	1.4218
	DHTC2X-5872	$4p+1/8p$	$p: 15$	1.422
	EKCQ6X-5872	$(1 + 4q)/8q$	$q=15$	1.4218
	FHP7ZU-5877			1.385
	G6UFUF-5872	$(1 + 4a)/8a$	$A=15$	1.422
	HG4EZ8-5872	$(1 + 4p)/8p$	$p = 15$	1.422
	LCXADP-5872	$(1 + 4r)/8r$	$r=15$	1.4218
	M6BRR2-5877	$(1 + 4p)/8p$	$p=15$	1.422
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=15$	2.343
	Q8QDVK-5872	$(4a+1)/8a$	$a=15$	1.42
	Q93U9X-5872	$(1 + 4p)/8p$	$p = 15$	1.4218
	RCYYJG-5877	*	*	1.385
	T76MGW-5872	$(1 + 4p)/8p$	$p=15$	1.4218
	TEJ6GJ-5872	$(1 + 4r)/8r$	$r=15$	1.4218
	U8QRNU-5872	$(1 + 4a)/8a$	$a = 15$	1.422
	ULB7RT-5872	$(1 + 4r)/8r$	$r=15$	1.4219
	UPBHNT-5872	$(1 + 4p)/8p$	$p=15$	1.42
	VYHDND-5877			1.385
	W7B6AC-5877	*	*	1.385

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D19S433	WAAF6C-5877			1.385
	WDWZBG-5872	$(1 + 4r)/8r$	$r = 15$	1.422
	WLND9V-5872	$(1 + 4p)/8p$	$p = 15$	1.4218
	Y2RT8T-5872	$(1 + 4p)/(8p)$	$p = 15$	1.4218
	Y782XD-5872	$(1 + 4r)/8r$	$r = 15$	1.4218
	Z7ZGGN-5877	$(1 + 4q)/8q$	$q = 15$	1.4218
	Z9Q6YB-5877	$(1 + 4p)/8p$	$P = 15$	1.4218
	Z9QHKQ-5872	$(1 + 4p)/8p$	$p = 15$	1.421828909
Statistical Analysis Summary of D19S433			Likelihood Ratio Mode:	1.4218

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D21S11	26MY2N-5872	$(p+q+4pq)/8pq$	$p=28 \ q=30$	2.2124
	3NA8CP-5872	$(p+q+4pq)/(8pq)$	$p = 28 \ q = 30$	2.2124
	48HUE9-5872	$(p+q+4pq)/8pq$	$p=28 \ q=30$	2.2124
	77ZHP3-5872	$(p+q+4pq)/8pq$	$p = 28; \ q = 30$	2.2124
	79BAXH-5877	$(p+q+4pq)8pq$	$p=28 \ q=30$	2.2124
	79RJT6-5872	$(p+r+4pr)/8pr$	$p=28 \ r=30$	2.2123
	7AM2U7-5872	$(p+q+4pq)/(8pq)$	$p=28 \ q=30$	2.2124
	7EBBY6-5877	$(p+q+4pq)/(8pq)$	$p=28 \ q=30$	2.212
	7FP7MP-5872	$p+q+4pq/8pq$	$p=28 \ q=30$	2.212392931
	7GMQT7-5872			2.2124
	7Q8TU6-5872	$(p+r+4pr)/8pr$	$p=28 \ r=30$	2.2123
	8D2WB4-5877	*	*	2.130
	ARBL22-5872	$(p+r+4pr)/8pr$	$p=28 \ r=30$	2.2123
	BFAMKE-5877	$(P+Q+4*P*Q)/(8*P*Q)$	$P=28 \ Q=30$	2.212
	BWXU2L-5877	$(p+q+4pq)/8pq$	$p=28 \ q=30$	2.2124
	CXLRKC-5872	$(p+q+4pq)/8pq$	$p=28 \ q=30$	2.2124
	D7VFXB-5877	$(p+q+4pq)/8pq$	$p=28 \ q=30$	2.2124
	DHTC2X-5872	$(p+q+4pq)/8pq$	$p: 28 \ q: 30$	2.212
	EKCQ6X-5872	$(p+q+4pq)/8pq$	$p=28 \ q=30$	2.2124
	FHP7ZU-5877			2.130
	G6UFUF-5872	$(a+b+4ab)/8ab$	$A=28 \ B=30$	2.212
	HG4EZ8-5872	$(p+q+4pq)/8pq$	$p = 28 \ q = 30$	2.212
	LCXADP-5872	$(p+r+4pr)/8pr$	$p=28 \ r=30$	2.2123
	M6BRR2-5877	$(p+q+4pq)/8pq$	$p=28 \ q=30$	2.212
	N34FBJ-5877	$LR=(0.25+0.25(P_i+P_j))/2P_i*P_j$	$p=28 \ q=30$	4.604
	Q8QDVK-5872	$(a+b+4ab)/(8ab)$	$a=28 \ b=30$	2.21
	Q93U9X-5872	$(p+q+4pq)/8pq$	$p = 28 \ q = 30$	2.2124
	RCYYJG-5877	*	*	2.130
	T76MGW-5872	$(p+q+4pq)/8pq$	$p=28 \ q=30$	2.2124
	TEJ6GJ-5872	$(p+r+4pr)/8pr$	$p=28 \ r=30$	2.2123
	U8QRNU-5872	$(a+b+4ab)/8ab$	$a = 28 \ b = 30$	2.212
	ULB7RT-5872	$(p+r+4pr)/8pr$	$p=28 \ r=30$	2.2127
	UPBHNT-5872	$(p+q+4pq)/8pq$	$p=28 \ q=30$	2.21
	VYHDND-5877			2.130
	W7B6AC-5877	*	*	2.130

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D21S11	WAAF6C-5877			2.130
	WDWZBG-5872	$(p+q+4pq)/8pq$	p=28 q=30	2.212
	WLND9V-5872	$(p+q+4pq)/8pq$	p=28 q=30	2.2124
	Y2RT8T-5872	$(p+q+4pq)/(8pq)$	p=28 q=30	2.2124
	Y782XD-5872	$(p+r+4pr)/8pr$	p=28 r=30	2.2123
	Z7ZGGN-5877	$(p+q+4pq)/8pq$	p=28 q=30	2.2124
	Z9Q6YB-5877	$(p+q+4pq)/8pq$	P=28 Q=30	2.2124
	Z9QHKQ-5872	$(p+q+4pq)/8pq$	p=28 q=30	2.212392931
Statistical Analysis Summary of D21S11			Likelihood Ratio Mode:	2.2124

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D22S1045	26MY2N-5872	$(1+2p)/4p$	$p=15$	1.0871
	3NA8CP-5872	$(1+2p)/(4p)$	$p = 15$	1.0871
	48HUE9-5872	$(1+2p)/4p$	$p=15$	1.0871
	77ZHP3-5872	$(1+2p)/4p$	$p= 15$	1.0871
	79BAXH-5877	$(1+2p)/4p$	$p=15$	1.0871
	79RJT6-5872	$(1+2t)/4t$	$t=15$	1.0871
	7AM2U7-5872	$(1+2q)/(4q)$	$q=15$	1.0871
	7EBBY6-5877	$(1+2p)/(4p)$	$p=15$	1.087
	7FP7MP-5872	$(1+2p)/4p$	$p=15$	1.087130108
	7GMQT7-5872			1.0871
	7Q8TU6-5872	$(1+2t)/4t$	$t=15$	1.0871
	8D2WB4-5877	*	*	1.078
	ARBL22-5872	$(1+2t)/4t$	$t=15$	1.0871
	BFAMKE-5877	$(1+2*Q)/(4*Q)$	$Q= 15$	1.087
	BWXU2L-5877	$(1+2p)/4p$	$p=15$	1.0871
	CXLRKC-5872	$(1+2p)/4p$	$p=15$	1.0871
	D7VFXB-5877	$(1+2p)/4p$	$p=15$	1.0871
	DHTC2X-5872	$2p+1/4p$	$p: 15$	1.087
	EKCQ6X-5872	$(1+2q)/4q$	$q=15$	1.0871
	FHP7ZU-5877			1.078
	G6UFUF-5872	$(1+2a)/4a$	$A=15$	1.087
	HG4EZ8-5872	$(1+4p)/8p$	$p = 15$	1.087
	LCXADP-5872	$(1+2t)/4t$	$t=15$	1.0871
	M6BRR2-5877	$(1+2p)/4p$	$p=15$	1.087
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=15$	1.087
	Q8QDVK-5872	$(2a+1)/4a$	$a=15$	1.09
	Q93U9X-5872	$(1+2p)/4p$	$p = 15$	1.0871
	RCYYJG-5877	*	*	1.078
	T76MGW-5872	$(1+2p)/4p$	$p=15$	1.0871
	TEJ6GJ-5872	$(1+2t)/4t$	$t=15$	1.0871
	U8QRNU-5872	$(1+2a)/4a$	$a = 15$	1.087
	ULB7RT-5872	$(1+2t)/4t$	$t=15$	1.0871
	UPBHNT-5872	$(1+2p)/4p$	$p=15$	1.09
	VYHDND-5877			1.078
	W7B6AC-5877	*	*	1.078

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D22S1045	WAAF6C-5877			1.078
	WDWZBG-5872	$(1+2q)/4q$	$q=15$	1.087
	WLND9V-5872	$(1+2p)/4p$	$p=15$	1.0871
	Y2RT8T-5872	$(1+2p)/(4p)$	$p=15$	1.0871
	Y782XD-5872	$(1+2t)/4t$	$t=15$	1.0871
	Z7ZGGN-5877	$(1+2q)/4q$	$q=15$	1.0871
	Z9Q6YB-5877	$(1+4p)/8p$	$P=15$	0.7936
	Z9QHKQ-5872	$(1+2p)/4p$	$p=15$	1.087130108
Statistical Analysis Summary of D22S1045			Likelihood Ratio Mode:	1.0871

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
CSF1PO	26MY2N-5872	$(1+2p)/4p$	$p=12$	1.1667
	3NA8CP-5872	$(1+2p)/(4p)$	$p = 12$	1.1667
	48HUE9-5872	$(1+2p)/4p$	$p=12$	1.1666
	77ZHP3-5872	$(1+2p)/4p$	$p = 12$	1.1667
	79BAXH-5877	$(1+2p)/4p$	$p=12$	1.1667
	79RJT6-5872	$(1+2q)/4q$	$q=12$	1.1666
	7AM2U7-5872	$(1+2p)/(4p)$	$p=12$	1.1667
	7EBBY6-5877	$(1+2p)/(4p)$	$p=12$	1.167
	7FP7MP-5872	$(1+2p)/4p$	$p=12$	1.166666667
	7GMQT7-5872			1.1667
	7Q8TU6-5872	$(1+2q)/4q$	$q=12$	1.1666
	8D2WB4-5877	*	*	1.153
	ARBL22-5872	$(1+2q)/4q$	$q=12$	1.1666
	BFAMKE-5877	$(1+2*Q)/(4*Q)$	$Q= 12$	1.167
	BWXU2L-5877	$(1+2p)/4p$	$p=12$	1.1667
	CXLRKC-5872	$(1+2p)/4p$	$p=12$	1.1667
	D7VFXB-5877	$(1+2p)/4p$	$p=12$	1.1667
	DHTC2X-5872	$2p+1/4p$	$p: 12$	1.167
	EKCQ6X-5872	$(1+2p)/4p$	$p=12$	1.1667
	FHP7ZU-5877			1.153
	G6UFUF-5872	$(1+2a)/4a$	$A=12$	1.167
	HG4EZ8-5872	$(1+4p)/8p$	$p = 12$	1.167
	LCXADP-5872	$(1+2q)/4q$	$q=12$	1.1666
	M6BRR2-5877	$(1+2p)/4p$	$p=12$	1.167
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=12$	1.166
	Q8QDVK-5872	$(2a+1)/4a$	$a=12$	1.17
	Q93U9X-5872	$(1+2p)/4p$	$p = 12$	1.1667
	RCYYJG-5877	*	*	1.153
	T76MGW-5872	$(1+2p)/4p$	$p=12$	1.1667
	TEJ6GJ-5872	$(1+2q)/4q$	$q=12$	1.1666
	U8QRNU-5872	$(1+2a)/4a$	$a = 12$	1.167
	ULB7RT-5872	$(1+2q)/4q$	$q=12$	1.1667
	UPBHNT-5872	$(1+2p)/4p$	$p=12$	1.17
	VYHDND-5877			1.153
	W7B6AC-5877	*	*	1.153

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
CSF1PO	WAAF6C-5877			1.153
	WDWZBG-5872	$(1+2q)/4q$	$q=12$	1.167
	WLND9V-5872	$(1+2p)/4p$	$p=12$	1.1667
	Y2RT8T-5872	$(1+2p)/(4p)$	$p=12$	1.1667
	Y782XD-5872	$(1+2q)/4q$	$q=12$	1.1666
	Z7ZGGN-5877	$(1+2p)/4p$	$p=12$	1.1667
	Z9Q6YB-5877	$(1+4p)/8p$	$P=12$	0.8333
	Z9QHKQ-5872	$(1+2p)/4p$	$p=12$	1.166666667
Statistical Analysis Summary of CSF1PO			Likelihood Ratio Mode:	1.1667

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
FGA	26MY2N-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	3NA8CP-5872	$(1 + 4p)/(8p)$	$p = 22$	1.2562
	48HUE9-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	77ZHP3-5872	$(1 + 4p)/8p$	$p = 22$	1.2562
	79BAXH-5877	$(1 + 4p)/8p$	$p=22$	1.2562
	79RJT6-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	7AM2U7-5872	$(1 + 4p)/(8p)$	$p=22$	1.2562
	7EBBY6-5877	$(1 + 4p)/(8p)$	$p=22$	1.256
	7FP7MP-5872	$(1 + 4p)/8p$	$p=22$	1.256200847
	7GMQT7-5872			1.2562
	7Q8TU6-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	8D2WB4-5877	*	*	1.235
	ARBL22-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	BFAMKE-5877	$(1 + 4*P)/(8*P)$	$P= 22$	1.256
	BWXU2L-5877	$(1 + 4p)/8p$	$p=22$	1.2562
	CXLRKC-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	D7VFXB-5877	$(1 + 4p)/8p$	$p=22$	1.2562
	DHTC2X-5872	$4p+1/8p$	$p: 22$	1.256
	EKCQ6X-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	FHP7ZU-5877			1.235
	G6UFUF-5872	$(1 + 4a)/8a$	$A=22$	1.256
	HG4EZ8-5872	$(1 + 4p)/8p$	$p = 22$	1.256
	LCXADP-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	M6BRR2-5877	$(1 + 4p)/8p$	$p=22$	1.256
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=22$	2.012
	Q8QDVK-5872	$(4a+1)/8a$	$a=22$	1.26
	Q93U9X-5872	$(1 + 4p)/8p$	$p = 22$	1.2562
	RCYYJG-5877	*	*	1.235
	T76MGW-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	TEJ6GJ-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	U8QRNU-5872	$(1 + 4a)/8a$	$a = 22$	1.256
	ULB7RT-5872	$(1 + 4p)/8p$	$p=22$	1.2564
	UPBHNT-5872	$(1 + 4p)/8p$	$p=22$	1.26
	VYHDND-5877			1.235
	W7B6AC-5877	*	*	1.235

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
FGA	WAAF6C-5877			1.235
	WDWZBG-5872	$(1 + 4p)/8p$	$p=22$	1.256
	WLND9V-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	Y2RT8T-5872	$(1 + 4p)/(8p)$	$p=22$	1.2562
	Y782XD-5872	$(1 + 4p)/8p$	$p=22$	1.2562
	Z7ZGGN-5877	$(1 + 4p)/8p$	$p=22$	1.2562
	Z9Q6YB-5877	$(1 + 4p)/8p$	$P=22$	1.2562
	Z9QHKQ-5872	$(1 + 4p)/8p$	$p=22$	1.256200847
Statistical Analysis Summary of FGA			Likelihood Ratio Mode:	1.2562

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaD	26MY2N-5872	$(1 + 4p)/8p$	$p = 13$	1.3639
	3NA8CP-5872	$(1 + 4p)/(8p)$	$p = 13$	1.3639
	48HUE9-5872	$(1 + 4p)/8p$	$p = 13$	1.3638
	77ZHP3-5872	$(1 + 4p)/8p$	$p = 13$	1.3639
	79BAXH-5877	$(1 + 4p)/8p$	$p = 13$	1.3639
	79RJT6-5872	$(1 + 4t)/8t$	$t = 13$	1.3638
	7AM2U7-5872	$(1 + 4q)/(8q)$	$q = 13$	1.3639
	7EBBY6-5877	$(1 + 4p)/(8p)$	$p = 13$	1.364
	7FP7MP-5872	$(1 + 4p)/8p$	$p = 13$	1.363856254
	7GMQT7-5872			1.3639
	7Q8TU6-5872	$(1 + 4t)/8t$	$t = 13$	1.3638
	8D2WB4-5877	*	*	
	ARBL22-5872	$(1 + 4t)/8t$	$t = 13$	1.3638
	BFAMKE-5877	$(1 + 4 \cdot R)/(8 \cdot R)$	$R = 13$	1.364
	BWXU2L-5877	$(1 + 4p)/8p$	$p = 13$	1.3639
	CXLRKC-5872	$(1 + 4p)/8p$	$p = 13$	1.3639
	D7VFXB-5877	$(1 + 4p)/8p$	$p = 13$	1.3639
	DHTC2X-5872	$4p + 1/8p$	$p = 13$	1.364
	EKCQ6X-5872	$(1 + 4q)/8q$	$q = 13$	1.3639
	G6UFUF-5872	$(1 + 4a)/8a$	$A = 13$	1.364
	HG4EZ8-5872	$(1 + 4p)/8p$	$p = 13$	1.364
	LCXADP-5872	$(1 + 4t)/8t$	$t = 13$	1.3638
	M6BRR2-5877	$(1 + 4p)/8p$	$p = 13$	1.364
	N34FBJ-5877	$LR = (0.25 + 0.5p)/p$	$p = 13$	2.227
	Q8QDVK-5872	$(4a + 1)/8a$	$a = 13$	1.36
	Q93U9X-5872	$(1 + 4p)/8p$	$p = 13$	1.3639
	RCYYJG-5877	*	*	
	T76MGW-5872	$(1 + 4p)/8p$	$p = 13$	1.3639
	TEJ6GJ-5872	$(1 + 4t)/8t$	$t = 13$	1.3638
	U8QRNU-5872	$(1 + 4a)/8a$	$a = 13$	1.364
	ULB7RT-5872	$(1 + 4t)/8t$	$t = 13$	1.3640
	UPBHNT-5872	$(1 + 4p)/8p$	$p = 13$	1.36
	W7B6AC-5877	^	^	
	WDWZBG-5872	$(1 + 4q)/8q$	$q = 13$	1.364
	WLND9V-5872	$(1 + 4p)/8p$	$p = 13$	1.3639

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaD	Y2RT8T-5872	$(1 + 4p)/(8p)$	p=13	1.3639
	Y782XD-5872	$(1 + 4t)/8t$	t=13	1.3638
	Z7ZGGN-5877	$(1 + 4q)/8q$	q=13	1.3639
	Z9Q6YB-5877	$(1 + 4p)/8p$	P=13	1.3639
	Z9QHKQ-5872	$(1 + 4p)/8p$	p=13	1.363856254
Statistical Analysis Summary of PentaD			Likelihood Ratio Mode:	1.3639

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaE	26MY2N-5872	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.5047
	3NA8CP-5872	$(p+q+4pq)/(8pq)$	$p = 14 \ q = 17$	4.5047
	48HUE9-5872	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.5047
	77ZHP3-5872	$(p+q+4pq)/8pq$	$p = 14 ; q = 17$	4.5047
	79BAXH-5877	$(p+q+4pq)8pq$	$p=14 \ q=17$	4.5047
	79RJT6-5872	$(p+s+4ps)/8ps$	$p=14 \ s=17$	4.5047
	7AM2U7-5872	$(p+q+4pq)/(8pq)$	$p=14 \ q=17$	4.5047
	7EBBY6-5877	$(p+q+4pq)/(8pq)$	$p=14 \ q=17$	4.505
	7FP7MP-5872	$p+q+4pq/8pq$	$p=14 \ q=17$	4.504713652
	7GMQT7-5872			4.5047
	7Q8TU6-5872	$(p+s+4ps)/8ps$	$p=14 \ s=17$	4.5047
	8D2WB4-5877	*	*	
	ARBL22-5872	$(p+s+4ps)/8ps$	$p=14 \ s=17$	4.5047
	BFAMKE-5877	$(P+Q+4*P*Q)/(8*P*Q)$	$P=14 \ Q=17$	4.505
	BWXU2L-5877	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.5047
	CXLRKC-5872	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.5047
	D7VFXB-5877	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.5047
	DHTC2X-5872	$(p+q+4pq)/8pq$	$p: 14 \ q: 17$	4.505
	EKCQ6X-5872	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.5047
	G6UFUF-5872	$(a+b+4ab)/8ab$	$A=14 \ B=17$	4.505
	HG4EZ8-5872	$(p+q+4pq)/8pq$	$p = 14 \ q = 17$	4.505
	LCXADP-5872	$(p+s+4ps)/8ps$	$p=14 \ s=17$	4.5047
	M6BRR2-5877	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.505
	N34FBJ-5877	$LR=(0.25+0.25(P_i+P_j))/2P_i*P_j$	$p=14 \ q=17$	7.177
	Q8QDVK-5872	$(a+b+4ab)/(8ab)$	$a=14 \ b=17$	4.50
	Q93U9X-5872	$(p+q+4pq)/8pq$	$p = 14 \ q = 17$	4.5047
	RCYYJG-5877	*	*	
	T76MGW-5872	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.5047
	TEJ6GJ-5872	$(p+s+4ps)/8ps$	$p=14 \ s=17$	4.5047
	U8QRNU-5872	$(a+b+4ab)/8ab$	$a = 14 \ b = 17$	4.504
	ULB7RT-5872	$(p+s+4ps)/8ps$	$p=14 \ s=17$	4.5045
	UPBHNT-5872	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.51
	W7B6AC-5877	^	^	
	WDWZBG-5872	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.505
	WLND9V-5872	$(p+q+4pq)/8pq$	$p=14 \ q=17$	4.5047

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaE	Y2RT8T-5872	$(p+q+4pq)/(8pq)$	p=14 q=17	4.5047
	Y782XD-5872	$(p+s+4ps)/8ps$	p=14 s=17	4.5047
	Z7ZGGN-5877	$(p+q+4pq)/8pq$	p=14 q=17	4.5047
	Z9Q6YB-5877	$(p+q+4pq)/8pq$	P=14 Q=17	4.5047
	Z9QHKQ-5872	$(p+q+4pq)/8pq$	p=14 q=17	4.504713652
Statistical Analysis Summary of PentaE			Likelihood Ratio Mode:	4.5047

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
SE33	26MY2N-5872	1/2		0.5000
	3NA8CP-5872	2/4		0.50000
	48HUE9-5872	0.5		0.5
	77ZHP3-5872	2/4		0.5000
	79BAXH-5877	0.5		0.5
	79RJT6-5872	1/2		0.5000
	7AM2U7-5872	1/2		0.5
	7EBBY6-5877	2/4		0.5
	7FP7MP-5872	2/4		0.5
	7GMQT7-5872			0.5000
	7Q8TU6-5872	1/2		0.5000
	8D2WB4-5877	*	*	0.5000
	ARBL22-5872	1/2		0.5000
	BFAMKE-5877	1/2		0.5000
	BWXU2L-5877	1/2		0.5
	CXLRKC-5872	1/2		0.5
	D7VFXB-5877	2/4		0.5000
	DHTC2X-5872	pq/2pq	p:19 q:28.2	0.5
	EKCQ6X-5872	1/2		.5000
	FHP7ZU-5877			0.5000
	G6UFUF-5872			0.5000
	HG4EZ8-5872			0.5
	LCXADP-5872	1/2		0.5000
	M6BRR2-5877	0.5		0.5000
	N34FBJ-5877	$LR = (0.25 + 0) / P_i * P_j$	p=0	833.3
	Q8QDVK-5872	1/2		0.50
	Q93U9X-5872	1/2		0.5
	RCYYJG-5877	*	*	0.5000
	T76MGW-5872	2/4		0.5
	TEJ6GJ-5872	1/2		0.5000
	U8QRNU-5872	1/2		0.5000
	ULB7RT-5872	1/2		0.5000
	UPBHNT-5872	1/2		0.5
	VYHDND-5877			0.5000
	W7B6AC-5877	*	*	0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
SE33	WAAF6C-5877			0.5
	WDWZBG-5872	1/2		0.5000
	WLND9V-5872	1/2		0.50000
	Y2RT8T-5872	(2/4)		0.5000
	Y782XD-5872	1/2		0.5000
	Z7ZGGN-5877	1/2		0.5000
	Z9Q6YB-5877			0.0001
	Z9QHKQ-5872			0.5
Statistical Analysis Summary of SE33			Likelihood Ratio Mode:	0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TH01	26MY2N-5872	1/2		0.5000
	3NA8CP-5872	2/4		0.50000
	48HUE9-5872	0.5		0.5
	77ZHP3-5872	2/4		0.5000
	79BAXH-5877	0.5		0.5
	79RJT6-5872	1/2		0.5000
	7AM2U7-5872	1/2		0.5
	7EBBY6-5877	2/4		0.5
	7FP7MP-5872	2/4		0.5
	7GMQT7-5872			0.5000
	7Q8TU6-5872	1/2		0.5000
	8D2WB4-5877	*	*	0.5000
	ARBL22-5872	1/2		0.5000
	BFAMKE-5877	1/2		0.5000
	BWXU2L-5877	1/2		0.5
	CXLRKC-5872	1/2		0.5
	D7VFXB-5877	2/4		0.5000
	DHTC2X-5872	$1/2p^2/p^2$	p: 7	0.5
	EKCQ6X-5872	1/2		.5000
	FHP7ZU-5877			0.5000
	G6UFUF-5872			0.5000
	HG4EZ8-5872			0.5
	LCXADP-5872	1/2		0.5000
	M6BRR2-5877	0.5		0.5000
	N34FBJ-5877	$LR=(0.25+0)/P_i \cdot P_j$	p=0	5.773
	Q8QDVK-5872	1/2		0.50
	Q93U9X-5872	1/2		0.5
	RCYYJG-5877	*	*	0.5000
	T76MGW-5872	2/4		0.5
	TEJ6GJ-5872	1/2		0.5000
	U8QRNU-5872	1/2		0.5000
	ULB7RT-5872	1/2		0.5000
	UPBHNT-5872	1/2		0.5
	VYHDND-5877			0.5000
	W7B6AC-5877	*	*	0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TH01	WAAF6C-5877			0.5
	WDWZBG-5872	1/2		0.5000
	WLND9V-5872	1/2		0.50000
	Y2RT8T-5872	(2/4)		0.5000
	Y782XD-5872	1/2		0.5000
	Z7ZGGN-5877	1/2		0.5000
	Z9Q6YB-5877			0.0001
	Z9QHKQ-5872			0.5
Statistical Analysis Summary of TH01			Likelihood Ratio Mode:	0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TPOX	26MY2N-5872	$(1+2p)/4p$	$p=8$	1.0153
	3NA8CP-5872	$(1+2p)/(4p)$	$p = 8$	1.0153
	48HUE9-5872	$(1+2p)/4p$	$p=8$	1.0152
	77ZHP3-5872	$(1+2p)/4p$	$p = 8$	1.0153
	79BAXH-5877	$(1+2p)/4p$	$p=8$	1.1053
	79RJT6-5872	$(1+2p)/4p$	$p=8$	1.0152
	7AM2U7-5872	$(1+2p)/(4p)$	$p=8$	1.0153
	7EBBY6-5877	$(1+2p)/(4p)$	$p=8$	1.015
	7FP7MP-5872	$(1+2p)/4p$	$p=8$	1.015251443
	7GMQT7-5872			1.0153
	7Q8TU6-5872	$(1+2p)/4p$	$p=8$	1.0152
	8D2WB4-5877	*	*	1.010
	ARBL22-5872	$(1+2p)/4p$	$p=8$	1.0152
	BFAMKE-5877	$(1+2*P)/(4*P)$	$P= 8$	1.015
	BWXU2L-5877	$(1+2p)/4p$	$p=8$	1.0153
	CXLRKC-5872	$(1+2p)/4p$	$p=8$	1.0153
	D7VFXB-5877	$(1+2p)/4p$	$p=8$	1.0153
	DHTC2X-5872	$2p+1/4p$	$p: 8$	1.486
	EKCQ6X-5872	$(1+2p)/4p$	$p=8$	1.0153
	FHP7ZU-5877			1.010
	G6UFUF-5872	$(1+2a)/4a$	$A=8$	1.015
	HG4EZ8-5872	$(1+4p)/8p$	$p = 8$	1.015
	LCXADP-5872	$(1+2p)/4p$	$p=8$	1.0152
	M6BRR2-5877	$(1+2p)/4p$	$p=8$	1.015
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=8$	1.015
	Q8QDVK-5872	$(2a+1)/4a$	$a=8$	1.01
	Q93U9X-5872	$(1+2p)/4p$	$p = 8$	1.0153
	RCYYJG-5877	*	*	1.010
	T76MGW-5872	$(1+2p)/4p$	$p=8$	1.0153
	TEJ6GJ-5872	$(1+2p)/4p$	$p=8$	1.0152
	U8QRNU-5872	$(1+2a)/4a$	$a = 8$	1.015
	ULB7RT-5872	$(1+2p)/4p$	$p= 8$	1.0153
	UPBHNT-5872	$(1+2p)/4p$	$p=8$	1.02
	VYHDND-5877			1.010
	W7B6AC-5877	*	*	1.010

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TPOX	WAAF6C-5877			1.010
	WDWZBG-5872	$(1+2p)/4p$	$p=8$	1.015
	WLND9V-5872	$(1+2p)/4p$	$p=8$	1.0153
	Y2RT8T-5872	$(1+2p)/(4p)$	$p=8$	1.0153
	Y782XD-5872	$(1+2p)/4p$	$p=8$	1.0152
	Z7ZGGN-5877	$(1+2p)/4p$	$p=8$	1.0153
	Z9Q6YB-5877	$(1+4p)/8p$	$P=8$	0.7576
	Z9QHKQ-5872	$(1+2p)/4p$	$p=8$	1.015251443
Statistical Analysis Summary of TPOX			Likelihood Ratio Mode:	1.0153

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
vWA	26MY2N-5872	$(1 + 4p)/8p$	$p=17$	1.0085
	3NA8CP-5872	$(1 + 4p)/(8p)$	$p = 17$	1.0085
	77ZHP3-5872	$(1 + 4p)/8p$	$p = 17$	1.0085
	79BAXH-5877	$(1 + 4p)/8p$	$p=17$	1.0085
	79RJT6-5872	$(1 + 4s)/8s$	$s=17$	1.0085
	7AM2U7-5872	$(1 + 4p)/(8p)$	$p=17$	1.0085
	7EBBY6-5877	$(1 + 4p)/(8p)$	$p=17$	1.009
	7FP7MP-5872	$(1 + 4p)/8p$	$p=17$	1.008543531
	7GMQT7-5872			1.0085
	7Q8TU6-5872	$(1 + 4s)/8s$	$s=17$	1.0085
	8D2WB4-5877	*	*	1.004
	ARBL22-5872	$(1 + 4s)/8s$	$s=17$	1.0085
	BFAMKE-5877	$(1 + 4*Q)/(8*Q)$	$Q= 17$	1.009
	BWXU2L-5877	$(1 + 4p)/8p$	$p=17$	1.0085
	CXLRKC-5872	$(1 + 4p)/8p$	$p=17$	1.0085
	D7VFXB-5877	$(1 + 4p)/8p$	$p=17$	1.0085
	DHTC2X-5872	$4p+1/8p$	$p: 17$	1.009
	FHP7ZU-5877		Omitted	
	G6UFUF-5872	$(1 + 4a)/8a$	$A=17$	1.009
	HG4EZ8-5872	$(1 + 4p)/8p$	$p = 17$	1.009
	LCXADP-5872	$(1 + 4s)/8s$	$s=17$	1.0085
	M6BRR2-5877	$(1 + 4p)/8p$	$p=17$	1.009
	N34FBJ-5877	$LR=(0.25+0.5p)/p$	$p=17$	1.517
	Q8QDVK-5872	$(4a+1)/8a$	$a=17$	1.01
	Q93U9X-5872	$(1 + 4p)/8p$	$p = 17$	1.0085
	RCYYJG-5877	*	*	1.004
	T76MGW-5872	$(1 + 4p)/8p$	$p=17$	1.0085
	TEJ6GJ-5872	$(1 + 4s)/8s$	$s=17$	1.0085
	U8QRNU-5872	$(1 + 4a)/8a$	$a = 17$	1.009
	ULB7RT-5872	$(1 + 4s)/8s$	$s= 17$	1.0086
	UPBHNT-5872	$(1 + 4p)/8p$	$p=17$	1.01
	VYHDND-5877			1.004
	W7B6AC-5877	*	*	1.004
	WAAF6C-5877			1.004
	WLND9V-5872	$(1 + 4p)/8p$	$p=17$	1.0085

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
vWA	Y2RT8T-5872	$(1 + 4p)/(8p)$	p=17	1.0085
	Y782XD-5872	$(1 + 4s)/8s$	s=17	1.0085
	Z7ZGGN-5877	NotReported		
	Z9Q6YB-5877	$(1 + 4p)/8p$	P=17	1.0085
	Z9QHKQ-5872	$(1 + 4p)/8p$	p=17	1.008543531
Statistical Analysis Summary of vWA			Likelihood Ratio Mode:	1.0085

Kinship DNA Statistics

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

TABLE 7

WebCode-Test	Kinship Index	Claim Supported?
26MY2N-5872	113.5748722	Yes
3NA8CP-5872	113.6	Yes
48HUE9-5872	112.6127615	Yes
77ZHP3-5872	53	Yes
79BAXH-5877	113.5749	Yes
79RJT6-5872	113.5748	Yes
7AM2U7-5872	112.6128	Yes
7EBBY6-5877	113.575	Yes
7FP7MP-5872	113.5748722	Yes
7GMQT7-5872	113.5749	Yes
7Q8TU6-5872	113.5748	Yes
8D2WB4-5877	5.2	Yes
ARBL22-5872	113.5748	Yes
BFAMKE-5877	113.6	Yes
BWXU2L-5877	113.6	Inconclusive
CXLRKC-5872	113.5749	Inconclusive
D7VFXB-5877	113.5694	Yes
DHTC2X-5872	113.6	Yes
EKCQ6X-5872	112.6133	Yes
FHP7ZU-5877	10	Yes
G6UFUF-5872	113.6	Yes
HG4EZ8-5872	110.6	Inconclusive
JGZCPU-5877		Yes
LCXADP-5872	113.5748	Yes
M6BRR2-5877	113.6	Inconclusive
N34FBJ-5877	1.90036e12	Yes
Q8QDVK-5872	113.57	Inconclusive
Q93U9X-5872	113.5749	Yes
RCYYJG-5877	5.2	Yes

TABLE 7 - Kinship DNA Statistics

WebCode-Test	Kinship Index	Claim Supported?
T76MGW-5872	113.57	Yes
TEJ6GJ-5872	113.5748	Yes
U8QRNU-5872	113.5	Yes
ULB7RT-5872	114	Yes
UPBHNT-5872	113.52	Yes
VYHDND-5877	5.2	Yes
W7B6AC-5877	5.2	Yes
WAAF6C-5877	5.2	Yes
WDWZBG-5872	112.6	Yes
WLND9V-5872	113.6	Yes
Y2RT8T-5872	113.58	Yes
Y782XD-5872	113.5748	Yes
Z7ZGGN-5877	112.6 and 99.1198%	Yes
Z9Q6YB-5877	2.5227E-18	No
Z9QHKQ-5872	113,5748722	Inconclusive

Response Summary		Participants: 44
<i>Is the relationship claim of Hispanic Half-Sibling supported?</i>		
Yes	37	
No	1	
Inconclusive	6	

Additional Kinship Statistical Results

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
3NA8CP-5872	The shared results between Alleged Sibling A and Alleged Sibling B are 113.6 times more likely to be observed if they were half-siblings rather than if they were unrelated.
48HUE9-5872	vWA was deliberately omitted from the calculation due to linkage disequilibrium between vWA and D12S391.
79BAXH-5877	AABB standards would require that the report states: The genetic evidence supports the relationship between A and B are related as second degree relative such as half siblings. Pu and Linacre have shown at a likelihood ratio greater than 33 that STR test results correctly confirm second-degree relationships greater than 99% of the time. (Increasing the confidence in half-sibship determination based upon 15 STR loci. Pu and Linacre. Journal of Forensic and Legal Medicine 15 (2008) 373–377).
7AM2U7-5872	vWA is ignored in calculations 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%.
7EBBY6-5877	LR is 113.575, which means that the probability that they are half siblings is 113.575 times more likely than the probability that they are unrelated.
7GMQT7-5872	Kinship index is still low and we are not reaching our minimum probability of 99.9%, instead probability is 99.1%. Preferably we do not report this result but we would advise additional testing with participation of other members of the family that can give information about the genotype of the alleged mother or testing the biological fathers.
8D2WB4-5877	* 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 probabilities with no rounding and a 1/k instead of x/N. The KinCALC software uses the NIST STRBase Population Database. The locus D12S391 was omitted due to linkage with VWA. Also we do not test PentaD and PentaE in our laboratory so those loci were not evaluated. The individuals were reported to be Hispanic; therefore only values for Hispanic were reported.
BFAMKE-5877	Probability of half sibship = 99.12% (50% prior probability).
BWXU2L-5877	Our SOPs only allow positive associations for LR's > 1000.
CVHUHW-5872	The laboratory does not perform statistical calculations for Half-sibling relationships.
DHTC2X-5872	The genetic findings were evaluated according to the following hypotheses (H): H1: Individual A is a half-sibling of Individual B. H2: Individual A is someone from the general population who is not genetically related to Individual B. The genetic finding was found to be 113 times more likely under the first hypothesis than the second. The genetic finding is 113 times more likely if individual A is a maternal sibling of individual B than if they are from another individual in the reference population. Since it is not possible to exclude siblinghood in this scenario, the study must be complemented with uniparental markers.
EKCQ6X-5872	For this kinship analysis, because of linkage disequilibrium between locus vWA and D12S391, the locus with the lower LR was omitted from the final calculation. In this instance, vWA had a lower LR than D12. Therefore, vWA was removed and recalculated.
FHP7ZU-5877	The likelihood ratios were calculated with the KIn CALC software that uses standard formulae for simple PI's and 2-person KI's, and applies a standard Elston-Stewart approach to other pedigrees. The following calculation approaches are applied at [Laboratory]: mean posterior allele probabilities based upon the NIST population databases and a 1/k prior; a theta value of 0.01; and vWA was omitted (due to linkage between vWA/D12S391). [Laboratory] does not test for or report the loci Penta D and Penta E; therefore, those loci were not reported.

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
G6UFUF-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 vWA LR of 1.009 would be made 1.000 and a CLR of 112.6 reported.
JCHAHN-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.
JGZCPU-5877	Half-sibship LR calculated with laboratory specific software. [Laboratory] utilizes a laboratory specific population database and DBLR software accounting for linkage in kinship analysis. Following [Laboratory] SOPs the half-sibship likelihood ratio of LR = 18 was calculated supporting the conclusion that sibling A is a half-sibling of sibling B.
KNT4BT-5872	According to our laboratory's standard operating procedures, this type of parent-child relationship involving half-siblings is not permitted, and therefore the calculation cannot be performed.
Q8QDVK-5872	The LR value obtained supports the half-sibling hypothesis; however, it does not, on its own, allow for a decision on kinship. It is appropriate to supplement the genetic analysis with additional relatives, especially those in the first degree of consanguinity.
Q93U9X-5872	Two DNA profiles from Hispanic half sibling relationship were compared by using the allele frequencies assigned for the test loci. There are likely to be half sibling relationship because probability of kinship index is greater than 99.1272%.
RCYYJG-5877	*The likelihood ratios were calculated with the KIn CALc software that uses standard formulae for simple PI's and 2-person KI's, and applies a standard Elston-Stewart approach to other pedigrees. The following calculation approaches are applied at [Laboratory]: mean posterior allele probabilities based upon the NIST population databases and a 1/k prior; a theta value of 0.01; and only one of the vWA/D12S391 loci (due to linkage between these two loci). [Laboratory] does not test for or report the loci Penta D and Penta E; therefore, those loci were not reported.
U8QRNU-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 establish its own cut-off values.
ULB7RT-5872	Based on the comparison of the genetic profiles, the occurrence of the DNA profiles obtained from the samples under evaluation is 114 times more likely considering these individuals are genetically related as maternal half-siblings, compared to if they are not related and the genetic profiles belong to individuals randomly selected from the population.
VYHDND-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 KI from only one of these loci was used to calculate the combined KI that was 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.
W7B6AC-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 D12S391 due to linkage disequilibrium with vWA. ^ Only GlobalFiler loci used in calculation, additional loci (PentaD, PentaE) not tested at our laboratory.

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
WAAF6C-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 Kin CALC software uses the NIST STRBase Population Database. Only one of the vWA/D12S391 loci were used to calculate the combined KI, due to linkage between these two loci. For this example, D12S391 was omitted. [Laboratory] does not test for or report Penta D and Penta E loci, therefore those loci were not reported.
WDWZBG-5872	vWA will not be included due to linkage disequilibrium. vWA formula: $(1 + 4q)/8q$, where $q = 17$. Likelihood ratio: 1.009.
WLND9V-5872	The shared results between Alleged Sibling A (Profile A) and Alleged Sibling B (Profile B) are 113.6 times more likely to be observed if they were half-siblings rather than if they were unrelated.
WVCACG-5877	[Laboratory] is not online with kinship statistics. No statistical calculations performed.
Y2RT8T-5872	The shared results between Alleged Sibling A and Alleged Sibling B are 113.58 times more likely to be observed if they were half-siblings rather than if they were unrelated.
Z7ZGGN-5877	Profile A used as the reference sibling profile for the half sibling comparison. Based on a comparison between Profile A and Profile B, it is 112.6 times more likely (assuming a 50% prior probability) that Profile B is related to Profile A as a half sibling, as opposed to being unrelated. The relative probability that Profile B is related to Profile A as a half sibling is 99.1198% in the PT25-5877 population. This is evidence supporting a half sibling relationship. Ideally for use in forensic and kinship analyses, genetic markers on the same chromosome should be more than 50 centimorgans (cM) apart in genetic distance (approximately 50 megabases (Mb) in physical distance)" (1). 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 $(1 + 4p) / 8p$, allele legend $p = 17$, likelihood ratio = 1.0085. D12S391: formula $(1 + 2p) / 4p$, allele legend $p = 20$, likelihood ratio = 2.1160. 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.
Z9Q6YB-5877	The kinship index does not support the hypothesis that the two profiles are half-siblings. For unshared alleles, the likelihood ratio used is 0.0001.

Additional Comments

TABLE 9

WebCode-Test	Additional Comments
2GGFQP-5872	The [Laboratory] does not use vWA or SE33 in our statistical calculations for kinship.
37DKA7-5877	The most conservative statistic is included in the report (caucasian). The laboratory does not report out probability of parentage. The laboratory does not do hand calculations for kinship statistics.
3C2ANN-5872	The forensic genetics laboratory only performs first and second-degree kinship relationships.
3LRVTM-5872	NR = No result. PowerPlex Fusion and MiniFiler were performed on Item 1 and the results are concordant at all overlapping loci. PowerPlex Fusion and Yfiler were performed on Items 2 - 4. Results are concordant at DYS391.
3NA8CP-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%.
6KKKUL-5872	Our laboratory doesn't currently calculate stats for vWA due to linkage with D12S391. Our laboratory doesn't currently calculate stats for SE33 due to high mutation rate.
77ZHP3-5872	Part I [Table 1 - Table 4]: The laboratory does not use D12S391 for paternity / kinship DNA statistics. 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]: The laboratory uses the all-ethnicities dataset (n=1036) for paternity DNA statistics. The laboratory generally reports the combined paternity index value to 2 significant figures. The laboratory uses a prior probability of 0.5 to calculate the Probability of Paternity. Part III [Table 6 - Table 7]: The laboratory does not use D12S391 for paternity / kinship DNA statistics.
79BAXH-5877	STR loci reported are from a combination of GlobalFiler and VeriFiler Plus kits. Paternity index calculation was based on GlobalFiler, plus additional Penta D, Penta E. D6S1043 and D12S391 are excluded for paternity index calculation due to linkage.
79RJT6-5872	1) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 4" is the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 2) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 3" is not the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 3) Extraction: -Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4) Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. - Item 2, Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5) Electrophoresis: -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 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 were derived from DNView Statistical Software and calculated using Microsoft Excel. NM: denotes non-male profile.
7GMQT7-5872	The allele 28 in D21S11 item 3 is suspiciously low. We cannot exclude a silent allele here but as this is not of influence for our report we dit no further analysis or calculation.
7K2W9K-5872	Part 2: Paternity DNA Statistics [Table 5: Paternity DNA Statistics & Conclusions]: Paternity Index not calculated for Item 4 due to exclusion. Probability of Paternity is outside of laboratory scope so was not calculated. Part 3 [Table 6 - Table 7]: Kinship DNA Statistics: Outside of laboratory scope so was not calculated.

TABLE 9

WebCode-Test	Additional Comments
7M8GX7-5872	Any labeled peaks seen in samples that are likely due to PCR/STR artifacts were not reported. DYS391 is reported as INC for the PowerPlex Fusion System as per laboratory policy.
7NK9N2-5877	Combined Paternity Index value calculated using the Caucasian database. We do not report the Probability of Paternity.
7Q8TU6-5872	1. On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 4" 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 3" 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 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 DNView Statistical Software and calculated using Microsoft Excel. Remark: 'NM' denotes non-male profile.
87E42P-5877	No Paternity Index included for Item 1-3. No statistics calculated for exclusions. Combined Paternity Index is only calculated to 2 significant figures by the software. Part III [Table 6 - Table 7] Kinship DNA statistics was not done because it is not applicable to our laboratory.
8D2WB4-5877	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.
8UZ9J6-5877	No PI values were calculated in respect of Alleged Father A as no statistical evaluation was carried out. The potential for mutation events was also considered but as differences occurred at greater than 2 loci, in our opinion, we have excluded Alleged Father A as the biological father of Child.
9ZLNM2-5877	D12 not included in stat. It is laboratory policy to include either vWA or D12 in a parentage stat, but not both, with vWA being the default. Per lab policy, of the 3 default statistical figures that are generated, the most common of the 3 is reported.
ARBL22-5872	1) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 4" is the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 2) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 3" is not the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 3) Extraction: -Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4) Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. - Item 2, Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5) Electrophoresis: -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 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) NM represents non male profile. 8) The statistical formula were derived from DNView Statistical Software and calculated using Microsoft Excel.

TABLE 9

WebCode-Test	Additional Comments
C68HBD-5877	The DNA profile for item 1, item 2, item 3 and item 4 were analyzed using Veriflex Express PCR Amplification Kit on a 3500 Genetic Analyzer with the GeneMapper ID-X v1.6 software. Probability index were calculated using Caucasian Allele Frequencies on NIST-STRBase and Combined Paternity Index (CPI) as a product of PI for the n-th locus ($CPI = PI1 \times PI2 \times \dots \times PIn$). Kinship DNA: Not applicable in our laboratory at the moment. The samples are named as listed below; PT1 - Item 1, PT2 - Item 2, PT3 - Item 3, PT4 - Item 4.
C8D3YD-5872	The following are the policy of the [Laboratory]. vWA omitted due to potential familial linkage with D12 for combined calculations. CPI is not calculated for an excluded father. The population group that yielded the lowest CPI was used for all calculations. The CPI was truncated. The probability of paternity was not reported.
CDHLGC-5877	Our Laboratory does not calculate a kinship statistic for excluded alleged fathers (item 3, Alleged Father A). Our Laboratory does not calculate a kinship statistic for half siblings. Our Laboratory only uses two significant figures when reporting out combined Paternity Index Value.
CVHUHW-5872	D12S391 is omitted from the final calculation, as per laboratory policy. The PI values are rounded to 3 significant figures. The CPI is truncated to 2 significant figures, as per laboratory policy. The Probability of Paternity is truncated to 4 digits past the decimal point, as per laboratory policy.
DHTC2X-5872	In paternity cases, our laboratory does not report partial PIs when the individual is excluded as the biological father of the child.
DYD32W-5877	Alleged father A excluded, therefore no PI values reported. Per laboratory procedures, D12S391 has not been used for statistical calculations.
E94TFC-5872	NR = No result. Power Plex Fusion and MiniFiler concordant for Item 1. Power Plex Fusion and YFiler concordant at DYS391 for Item 2. Power Plex Fusion and YFiler concordant at DYS391 for Item 3. Yfiler and Low Copy Number YFiler concordant for Item 3. Power Plex Fusion and YFiler concordant at DYS391 for Item 4.
EL8A8Y-5877	SE 33 not used in statistics as per laboratory procedure.
EVTDDD-5872	Our lab only reports the combined CPI, not a particular ethnic group. Our lab reports only the 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 relationships.
EYTQUB-5872	NR = No Results. Globalfiler and Yfiler concordant at DYS391 for Item 2. Globalfiler and Yfiler concordant at DYS391 for Item 3. Globalfiler and Yfiler concordant at DYS391 for Item 4. Yfiler and LCN-Y concordant at all loci for Item 2. Yfiler and LCN-Y concordant at all loci for Item 3. Yfiler and LCN-Y concordant at all loci for Item 4.
F9XX9B-5877	H1: Alleged Father B (Item 4) 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 ($LR = 1,52e+011$) for the first proposition that Alleged Father B (Item 4) 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). Mother's (Item 1) DNA profile was used in statistical calculations. 2. The probability of paternity of the Alleged Father A (Item 3) in relation to the Known Child (Item 2) is excluded.
FEJQKB-5872	Individual completing the proficiency test is not qualified in statistical calculations, thus no statistical calculations have been provided for assessment.

TABLE 9

WebCode-Test	Additional Comments
FHP7ZU-5877	The likelihood ratios were calculated with the KIn CALc software that uses standard formulae for simple PI's and 2-person KI's, and applies a standard Elston-Stewart approach to other pedigrees. The following calculation approaches are applied at [Laboratory]: mean posterior allele probabilities based upon the NIST population databases and a 1/k prior; a theta value of 0.01; and only one of the vWA/D12S391 loci is used (due to linkage between these two loci). [Laboratory] does not report a probability of paternity.
FHZ9LR-5872	Parts I and II [Table 1 - Table 5]- D12S391 was not used in Parentage calculations, per Department policy. The Combined Paternity Index value is truncated to 2 significant figures, per Department policy. The Probability of Paternity is truncated at four places past the decimal, per Department policy. Part III [Table 7 - Table 8] - Half-Sibling relationship calculations are not performed by the Department; therefore, this section was left blank.
FJBB9Q-5872	Our lab does not include the D12S391 locus in statistical calculations. The Probability of Paternity is truncated at four digits beyond the decimal place, per our laboratory's policy. The CPI is truncated to two significant figures, per our laboratory's policy. For Item 3, a visual exclusion was utilized per our laboratory's policy. This requires a minimum of three inconsistent loci. Therefore, no paternity index calculations were performed at those individual loci where no inconsistency was observed for Item 3. We currently do not offer half-sibling statistical analysis.
G2AP7W-5877	SE33 not used for statistics as per laboratory policy.
GMRY69-5877	NT = not tested. NR = no results. 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 (17), vWA (14,16), D16 (8), CSF (11,12), TPOX (8), D8 (12), D21 (32.2), D18 (15), D2S441 (11,15), D19 (13,14), TH01 (9.3), FGA (20,21), D22 (15), D5 (11), D13 (11,12), D7 (11), SE33 (29.2), D10 (15), D1 (17.3), D12 (20), and D2S1338 (19). RMNE report statement: The expected frequency of individuals who could be the father of C.S. is less than 1 in 980 million in the general male population.
HHCT38-5872	The laboratory does not perform Kinship DNA.
JCHAHN-5872	PI is not calculated when an individual is excluded as the biological father. The laboratory protocol is not to include the D12S391 locus for paternity calculations. The laboratory does not calculate kinship statistics for Y-STR results; therefore, Y-STR analysis was not performed in the proficiency test.
JGZCPU-5877	NR = No Results. PI, Combined Paternity Index, and Probability of Paternity calculations were not performed due to [Laboratory] calculating likelihood ratios for paternity and kinship analyses utilizing a laboratory specific database and the DBLR software. The likelihood ratio obtained for Alleged Father A = 1/LR = 1.5 septillion (exclusion), supporting the conclusion that Alleged Father A is excluded as the biological father of the child. The likelihood ratio obtained for Alleged Father B = 1.8 billion supporting the conclusion that Alleged Father B is the biological father of the child.
LCE87P-5877	Alleged Father A excluded, therefore no PI values reported. Per laboratory procedures, D12S391 has not been used for statistical calculations.

TABLE 9

WebCode-Test	Additional Comments
LCXADP-5872	1. On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 4" 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 3" is NOT the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 3. Extraction: Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4. Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on Proflex PCR System. -Item 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. NM: denotes non-male profile.
LZZCN6-5877	NR= no results. 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 17, vWA 14,16, D16 8, CSF 11,12, TPOX 8, D8 12, D21 32.2, D18 15, D2S441 11,15, D19 13,14, TH01 9.3, FGA 20,21, D22 15, D5 11, D13 11,12, D7 11, SE33 29.2, D10 15, D1 17.3, D12 20, D2S1338 19. RMNE report statement: The expected frequency of individuals who could be the father of Known Child is less than 1 in 980 million in the general male population.
M9CQ9L-5872	D12S391 is excluded from all final calculations per laboratory policy. The final combined paternity index is truncated to 2 significant figures per laboratory policy. The probability of paternity is truncated to 4 places past the decimal point per laboratory policy. The laboratory does not conduct half-sibling calculations.
MGLELJ-5872	Combined Paternity Index value truncated to 2 significant digits per Lab protocol. The D12S391, DYS391, and Amelogenin loci are not used for statistical purposes per Lab protocol. No locus PI values produced for samples that are eliminated as a biological parent. Kinship DNA Statistics Section is not applicable.
MVK7L3-5872	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 4 CANNOT BE EXCLUDED AS BIOLOGICAL FATHER OF THE CHILD (ITEM 2) IN THE ITEM NUMBER 3 THERE WAS AN EXCLUSION OF THE INDIVIDUAL AS BIOLOGICAL FATHER AS THE CHILD (ITEM 2). THEREFORE WE DIDN'T REALIZE THE STATISTICAL CALCULATION.
N34FBJ-5877	A simple common formula is used to calculate allele frequencies. Item 4 is the biological father of Item 2.
N4DX83-5872	These results represent a composite profile between the GlobalFiler and ForenSeq Sig prep data. For Item 2, D22 was reported as 15,15 due to the GlobalFiler data but was 15,NR in Sig Prep. The samples were also processed for whole genome mitochondrial sequencing. DNAView software was used for kinship and vWA/D12 linkage was accounted for.
NA47V3-5872	SE 33 and vWA are not used for statistical calculations by this laboratory.
NRJEW3-5872	Our lab does not calculate paternity statistics on vWA or SE33.
PUHDKZ-5872	FBI Popstats NIST 2017 data set. SE33 and vWA are not utilized for statistical calculations in this laboratory.

TABLE 9

WebCode-Test	Additional Comments
PYXLBL-5877	Alleged father A excluded, therefore no PI values reported. Per laboratory procedures, D12S391 has not been used for statistical calculations.
RCYYJG-5877	The likelihood ratios were calculated with the KIn CALc software that uses standard formulae for simple PI's and 2-person KI's, and applies a standard Elston-Stewart approach to other pedigrees. The following calculation approaches are applied at [Laboratory]: mean posterior allele probabilities based upon the NIST population databases and a 1/k prior; a theta value of 0.01; and only one of the vWA/D12S391 loci (due to linkage between these two loci). [Laboratory] does not report the probability of paternity, therefore 2c in the "Paternity Index" tab was not applicable.
T6DKW3-5877	The [Laboratory] does not use the SE33 locus for kinship statistics.
TEJ6GJ-5872	1) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 4" is the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 2) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 3" is not the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 3) Extraction: -Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4) Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. - Item 2, Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5) Electrophoresis: -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 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 were derived from DNAView Statistical Software and calculated using Microsoft Excel. NM: denotes non-male profile.
TMDABK-5877	[Laboratory] is not currently online with kinship statistics.
TZGZPX-5872	Our lab does not calculate paternity statistics on vWA or SE33.
U8QRNU-5872	STR Amplification Kits information should be updated. For Part I, it would be helpful to have clear instructions on how many significant figures to use, as indicated in Part III. Scientific notation can be a good alternative for standardization. It would be very helpful to include a warning before the automatic logout.
UX6LVW-5872	Our Lab does not calculate paternity statistics on vWA or SE33
VE9GNU-5872	NR = No results. Item 2 results were concordant in Powerplex Fusion and Yfiler at DYS391. Item 3 results were concordant in Powerplex Fusion and Yfiler at DYS391. Item 4 results were concordant in Powerplex Fusion and Yfiler at DYS391. Item 3 results were concordant in Yfiler and LCN Yfiler at all loci.
VP93WE-5877	Alleged father A is excluded; therefore, no PI values were reported. Per laboratory procedures, D12S391 has not been used for statistical calculations.
VYHDND-5877	For Part I [Table 1 - Table 4] - PI values at specific loci, Part II [Table 5: Paternity DNA Statistics & Conclusions] - Combined PI value, and Part III [Table 6 - Table 7] - 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 KI from only one of these loci was used to calculate the combined KI that was reported. For Part II [Table 5: Paternity DNA Statistics & Conclusions]: our laboratory does not report Probabilities of Paternity.

TABLE 9

WebCode-Test	Additional Comments
W7B6AC-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 D12S391 due to linkage disequilibrium with vWA.
WAAF6C-5877	Part II: PATERNITY DNA STATISTICS [Table 5: Paternity DNA Statistics & Conclusions]: 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 Kin CALc software uses the NIST STRBase Population Database. Only one of the vWA/D12S391 loci were used to calculate the combined KI, due to linkage between these two loci. For this example, D12S391 was omitted. Our laboratory does not report the Probability of Paternity.
WDUAZR-5872	NR=no results, GF and YF are concordant for Item 2, GF and YF are concordant for Item 3, GF and YF are concordant for Item 4. YF and LCN-Y are concordant for Item 3.
WLND9V-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. 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.
Y2RT8T-5872	For the DNA Paternity Statistics: 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.
Y782XD-5872	1. On comparison to the DNA profile obtained, I found that the source of bloodstain specimen "Item 4" is the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 2. On comparison to the DNA profile obtained, I found that the source of bloodstain specimen "Item 3" 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 DNA View Statistical Software and calculated using Microsoft Excel. Remark: 'NM' denotes non-male profile.

TABLE 9

WebCode-Test	Additional Comments
Z7ZGGN-5877	N/A = not applicable. NIST Caucasian 2017 population database used. "Ideally for use in forensic and kinship analyses, genetic markers on the same chromosome should be more than 50 centimorgans (cM) apart in genetic distance (approximately 50 megabases (Mb) in physical distance)" (1). 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: Item 1 (Parent Role/Mother), Item 2 (Child Role), and Item 3 (Parent Role/Father) Comparison: • vWA = 1.7030. • D12S391 = 0.0000 PATTERN FAILURE As such, both loci will be evaluated. Item 1 (Parent Role/Mother), Item 2 (Child Role), and Item 4 (Parent Role/Father) Comparison: • vWA = 1.7030. • D12S391 = 4.5126. 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.
Z9Q6YB-5877	As per our laboratory guidelines, population database used is GlobalFiler (African American ethnicity).

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 25-5872: DNA Parentage

DATA MUST BE SUBMITTED BY **Oct. 20, 2025, 11:59 p.m. EDT** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: R7BDCV

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™ Micro Cards):

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 - Additional DNA

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

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

Part II: PATERNITY DNA STATISTICS

1. Which alleged father cannot be excluded as the biological parent of the child (Item 2)?
- ☐ Item 3 - Alleged Father A
 - ☐ Item 4 - Alleged Father B
 - ☐ Neither - Both alleged fathers are excluded as being the biological parent of the child.
2. If applicable, calculate the Combined Paternity Index and the Probability of Paternity. For data submission purposes, CTS requests that you use the population database typically utilized in casework at your agency (e.g., FBI Popstats or NIST-STRBASE). If you are unable to use either of these databases, please indicate the other population database used.
- 2a. Choose a Population Database:
- ☐ FBI Popstats Population Database
- ☐ NIST-STRBASE Population Database
- (Access this publicly available U.S. population data set at [STRBASE](#). From there, select the hyperlink labeled "Revised allele frequencies file" under the title "Additional Information".)
- Other Population Database:
- 2b. Record the Combined Paternity Index value:
- 2c. Record the Probability of Paternity:

Part III: KINSHIP DNA STATISTICS

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

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

Example: Questioned Half Sibling Relationship

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

Scenario:

The two DNA profiles below are presented as a potential Hispanic Half-Sibling relationship who share the same mother. 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	13,13	13,17.3	13: 0.1144	17.3: 0.1483			
D2S1338	18,23	20,24	18: 0.0805	20: 0.1271			
			23: 0.1398	24: 0.0763			
D2S441	10,12	11,11	10: 0.3369	11: 0.2987			
			12: 0.0360				
D3S1358	15,17	16,17	15: 0.3220	16: 0.2797			
			17: 0.1843				
D5S818	11,11	11,12	11: 0.3898	12: 0.3390			

Locus	A	B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
D7S820	8,9	9,11	8: 0.1208	9: 0.0911			
			11: 0.2775				
D8S1179	10,14	10,15	10: 0.0932	14: 0.2627			
			15: 0.1292				
D10S1248	13,13	13,14	13: 0.2733	14: 0.3390			
D12S391	20,20	18,20	18: 0.1780	20: 0.1547			
D13S317	9,13	12,12	9: 0.1653	12: 0.2352			
			13: 0.1059				
D16S539	10,11	9,11	9: 0.1398	10: 0.1504			
			11: 0.2648				
D18S51	14,19	16,19	14: 0.1610	16: 0.1250			
			19: 0.0466				
D19S433	14,15	13,15	13: 0.2225	14: 0.3538			
			15: 0.1356				
D21S11	28,30	28,30	28: 0.0996	30: 0.2733			
D22S1045	11,15	15,15	11: 0.0636	15: 0.4258			

Locus	A	B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
CSF1PO	12,12	11,12	11: 0.2797	12: 0.3750			
FGA	22,24	22,25	22: 0.1653	24: 0.1419			
			25: 0.1186				
PentaD	12,13	9,13	9: 0.2426	12: 0.1574			
			13: 0.1447				
PentaE	14,17	14,17	14: 0.0720	17: 0.0551			
SE33	19,28.2	20.2,29.2	19: 0.0890	20.2: 0.0042			
			28.2: 0.0678	29.2: 0.0614			
TH01	7,7	9,9.3	7: 0.2966	9: 0.1462			
			9.3: 0.2182				
TPOX	8,9	8,8	8: 0.4852	9: 0.0932			
vWA	17,18	14,17	14: 0.0805	17: 0.2458			
			18: 0.1801				

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

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

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

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

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

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

RELEASE OF DATA TO ACCREDITATION BODIES

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

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

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

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

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

ANAB Certificate No.

A2LA Certificate No.

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

Authorized Contact Person and Title

Laboratory Name

Location (City/State)