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FORENSIC TESTING PROGRAM

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DNA Parentage Test No. 24-5870/5
Summary Report

Each participant received a sample set consisting of four blood samples representing a paternity case. Samples were collected from a mother, a daughter, and two potential fathers. Participants were asked to analyze the samples using their existing protocols. The test also included a paper kinship exercise where participants were asked to evaluate the provided DNA profiles and determine if a maternal half-sibling relationship claim was supported. Data were returned from 88 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 set consisted of known blood samples from four individuals (Items 1-4), a mother, a daughter, and two potential fathers, provided on either FTA™ Micro Cards or swabs. Participants were asked to analyze these items using their existing protocols. Also included with this test was a kinship exercise that consisted of autosomal DNA profiles from two individuals for comparison. Participants were requested to determine if a maternal half-sibling relationship claim was supported following the review of these profiles.

SAMPLE PREPARATION: All items were prepared from human whole blood which was drawn into EDTA tubes. Each FTA™ Micro Card was spotted with 75 µL of blood, while each swab (two swabs per item) was spotted with 100 µL of blood. Item 1 was created from a female (mother) donor. Item 2 was created from a female (daughter) donor. Item 3 was created from a male donor who was not the biological father of the Item 2 female, and Item 4 was created from a male donor who was the biological father of the Item 2 female. The items were prepared at separate times and were packaged once they were thoroughly dried. Completed sample sets were stored at -20°C until shipment on February 12, 2024.

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

KINSHIP EXERCISE: This exercise included allelic results representing a maternal half-sibling relationship.

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

Key to Test Substrates

5870 - FTA™ Micro Cards

5875 - Swabs

Amelogenin and STR Results

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

Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	
1	13,17	23,23	11,11	15,16	11,12	*
	8,11	13,15	14,14	16,18	10,11	9,13
	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26	12,13	8,11	22,27.2	9.3,9.3	6,12
	16,18	NM	NM	NM	NM	
2	13,13	19,23	10,11	15,16	11,12	*
	8,10	13,13	13,14	18,19	8,10	9,13
	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17	NM	NM	NM	NM	
3	12,16	23,25	14,15	15,15	11,12	*
	10,10	11,13	12,13	18,22	13,14	9,11
	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17	2	
4	13,15	19,23	10,11	16,16	12,12	*
	10,11	12,13	13,16	15,19	8,12	11,13
	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11,11
	17,19	10	17	17	2	

YSTR Results

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

Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
3	*	16	15,15	12	29	22	10	10	14
	16	10	12	21	*	14	18	*	23
	*	10	*	16	17	*	21	*	11
4	*	14	11,15	14	30	24	10	13	13
	14	12	12	19	*	16	17	*	22
	*	12	*	17	17	*	23	*	11

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

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

Paternity Indices

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

Item - Database						
	D1S1656	**D2S1338**	**D2S441**	**D3S1358**	**D5S818**	**D6S1043**
	D7S820	**D8S1179**	**D10S1248**	**D12S391**	**D13S317**	**D16S539**
	D18S51	**D19S433**	**D21S11**	**D22S1045**	**Amelogenin**	**CSF1PO**
	FGA	**Penta D**	**Penta E**	**SE33**	**TH01**	**TPOX**
	vWA					
3PI - Grand Mean ± 3STD Range**						
	0-0.00507	0-0.00169	0-0.00472	1.24-2.04	1.26-1.5	*
	2.72-3.93	1.35-2.11	1.54-2.13	0-0.00486	0-0.00331	0.835-3.09
	3.2-4.79	0-0.00202	0-0.00236	0-0.0048	-	1.5-1.73
	0-0.0778	0-8.14	0-0.000848	0-0.0116	0-0.00614	0-0.000473
	1.66-2.44					
4PI - FBI PopStats						
	3.67-6.23	1.18-2.98	0.715-1.8	1.23-1.76	1.07-1.78	*
	1.47-1.82	1.07-2.2	1.61-2.34	1.55-2.75	2.58-10	1.01-3.98
	7.54-9.48	1.82-10.7	8.41-24.7	2.46-9.59	-	1.44-1.7
	2.87-4.68	2.48-4.06	5.15-8.72	22.7-56.4	1.74-2.58	3.28-4.13
	1.79-2.54					
4PI - Grand Mean ± 3STD Range**						
	2.79-6.76	0.934-3.98	0.491-2.41	1.21-1.98	1.05-1.73	*
	1.39-1.93	1.24-2.2	1.52-2.25	1.04-4.02	1.6-9	0.655-3.55
	6.22-9.91	2.08-13.5	7.12-29.9	1.89-11.4	-	1.46-1.75
	2.4-4.57	2.76-3.72	5.8-8.08	5.74-62.2	1.74-2.51	3.31-4.31
	1.65-2.5					
4PI - NIST-STRBASE						
	3.27-5.55	1.79-3.55	0.746-2.4	1.54-1.79	1.01-1.7	*
	1.5-1.78	1.65-1.98	1.7-1.94	1.95-3.49	4-5.07	1.65-1.96
	6.39-9.19	7.58-10.4	13.9-27.5	3.77-11	-	1.55-1.72
	3.01-3.52	3.15-3.26	6.37-7.52	13.8-40.7	1.8-2.43	3.75-4.1
	1.84-2.2					

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

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

Summary Comments

This test was designed to allow participants to assess their proficiency in the analysis and interpretation of four known blood samples, along with the determination of paternity. Item 1 was created from a female (mother) donor. Item 2 was created from a female (daughter) donor. Item 3 was created from a male donor who was not the biological father of the Item 2 female, and Item 4 was created from a male donor who was the biological father of the Item 2 female. Participants were asked to analyze the items and provide allelic and statistical results, as well as relationship conclusions. The test also included a paper kinship exercise where participants were asked to evaluate provided DNA profiles and report the kinship index and conclusions for a proposed maternal half-sibling relationship. Refer to the Manufacturer's Information for preparation details.

DNA Analysis

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

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 but one reported 99.99% or higher.

Kinship DNA Statistics

Twenty-seven participants submitted a response for the paper kinship exercise. For the loci likelihood ratio data, five participants reported extreme data in comparison to the calculated mode at one or more loci.

Of the 27 participants, 18 reported a combined Kinship Index between 9400 and 9419. A consensus was achieved concerning the maternal half-sibling relationship (Caucasian) where all but two participants reported that the relationship claim was supported. The remaining two participants 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

2K6TQN-5870 PowerPlex® Fusion 6C

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	22,27.2	9.3	6,12
	16,18					

2N3EDK-5875 GlobalFiler™ Express

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					

6BJ4CX-5870 GlobalFiler™ (CODIS Popstats)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	--			--	

6FZCYX-5875 PowerPlex® Fusion 5C (eDNA)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26	12,13	8,11		9.3,9.3	6,12
	16,18					

6JDCWN-5870 PowerPlex® Fusion (Popstats)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

6UYDCY-5870 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	--			--	

TABLE 1

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

Item 1 - STR Results

6V8NBM-5870 PowerPlex® Fusion 5C (PopStats)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

6W2BMR-5870 PowerPlex® Fusion 5C

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26	12,13	8,11		9.3,9.3	6,12
	16,18	ND				

6XFKZX-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X,X	10,12
	26			22,27.2	9.3	6,12
	16,18	NM			NM	

7B3ABN-5870 PowerPlex® Fusion (FBI Popstats)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

8UDG7G-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	NT
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	NT	NT	22,27.2	9.3	6,12
	16,18	NR	NT	NT	NR	

9279QF-5870 PowerPlex® Fusion 6C

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	22,27.2	9.3	6,12
	16,18					

TABLE 1

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

Item 1 - STR Results

9DFT9M-5875 PowerPlex® Fusion 6C

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	22,27.2	9.3	6,12
	16,18					

A2KYBK-5870 PowerPlex® Fusion (PopStats in CODIS 11.0)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

A7C7UT-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X,X	10,12
	26			22,27.2	9.3	6,12
	16,18	NM			NM	

A9468Q-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X,X	10,12
	26			22,27.2	9.3	6,12
	16,18	NM			NM	

ADDJRB-5875 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26			22,27.2	9.3	6,12
	16,18					

AJZ9CK-5870 PowerPlex® Fusion (Popstats)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

TABLE 1

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

Item 1 - STR Results

ALR62E-5870 PowerPlex® Fusion 6C (Familias v 3.3.1)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26	12,13	8,11	22,27.2	9.3,9.3	6,12
	16,18					

ATM83Q-5870 GlobalFiler™ (CODIS popstats)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	

B6EBQG-5870 PowerPlex® Fusion (Popstats)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

BFYMZ9-5870 PowerPlex® F6C

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26	12,13	8,11	22,27.2	9.3,9.3	6,12
	16,18	-	-	-		

BKC6GP-5870 GlobalFiler™ (PopStats)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	

BLNZ2W-5870 PowerPlex®

	13,17	23,23		15,16	11,12	11,13
	8,11	13,15		16,18	10,11	9,13
1	13,13	14,14.2	31.2,32		X,X	10,12
	26,26	12,13	8,11		9.3,9.3	6,12
	16,18					

TABLE 1

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

Item 1 - STR Results

BP8YEQ-5870 GlobalFiler™ (PopStats)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	

CCDXFV-5870 PowerPlex® 21

	13,17	23,23		15,16	11,12	11,13
	8,11	13,15		16,18	10,11	9,13
1	13,13	14,14.2	31.2,32		X,X	10,12
	26,26	12,13	8,11		9.3,9.3	6,12
	16,18					

D6QRU9-5870 GlobalFiler™ (DNA VIEW)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					

DD3QNJ-5875 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	no results			no results	

DHC7X8-5875 PowerPlex® Fusion (Genoproof 3)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26	12,13	8,11		9.3,9.3	6,12
	16,18					

DM9RMP-5870 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					

TABLE 1

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

Item 1 - STR Results

E3FBXL-5870	GlobalFiler™ (Standalone Popstats)					
	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	
EE9Q4B-5870	GlobalFiler™					
	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					
EJNYRA-5870	PowerPlex® Fusion 6C					
	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	22,27.2	9.3	6,12
	16,18					
EKVHAH-5870	GlobalFiler™ Express					
	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X,X	10,12
	26			22,27.2	9.3	6,12
	16,18	NM			NM	
EZBJ79-5870	PowerPlex® Fusion					
	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18	NR				
FFJU9L-5870	GlobalFiler™ Express					
	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X,X	10,12
	26			22,27.2	9.3	6,12
	16,18	NM			NM	

TABLE 1

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

Item 1 - STR Results

GBJ66J-5870 GlobalFiler™ (Popstats)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	

GGB9FB-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26			22,27.2	9.3	6,12
	16,18	-			-	

GMDLUK-5875 PowerPlex® 21

	13,17	23		15,16	11,12	11,13
	8,11	13,15		16,18	10,11	9,13
1	13	14,14.2	31.2,32		X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

GT4W4J-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X,X	10,12
	26			22,27.2	9.3	6,12
	16,18	NM			NM	

GWJ4RJ-5870 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	

H6ENA6-5875 Investigator ESSplex SE QS KIT (GeneMapper Software 5)

	13,17	23,23	11,11	15,16		
		13,15	14,14	16,18		9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	
	26,26			22,27.2	9.3,9.3	
	16,18					

TABLE 1

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

Item 1 - STR Results

H8FMDJ-5870 Identifiler® plus (local/state software)

		23,23		15,16	11,12	
	8,11	13,15			10,11	9,13
1	13,13	14,14.2	31.2,32		X,X	10,12
	26,26				9.3,9.3	6,12
	16,18					

HHY4D4-5870 GlobalFiler™ (DNA View 37.11)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					

HLYE94-5875 VeriFiler Express (GeneMapper ID-X v1.6)

	13,17	23,23	11,11	15,16	11,12	11,13
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26	12,13	8,11		9.3,9.3	6,12
	16,18					

HPKWQN-5870 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					

JPRVX3-5870 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	NR			NR	

JQAPYD-5870 PowerPlex® Fusion (Popstats)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

TABLE 1

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

Item 1 - STR Results

KHUL84-5870 PowerPlex® 21

	13,17	23,23		15,16	11,12	11,13
	8,11	13,15		16,18	10,11	9,13
1	13,13	14,14.2	31.2,32		X,X	10,12
	26,26	12,13	8,11		9.3,9.3	6,12
	16,18					

L3CXUZ-5870 PowerPlex® Fusion, iPLEXSTR

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	22,27.2	9.3	6,12
	16,18					

L6FPLD-5870 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					

LRFQXG-5870 Identifiler® Direct

		23,23		15,16	11,12	
	8,11	13,15			10,11	9,13
1	13,13	14,14.2	31.2,32		X,X	10,12
	26,26				9.3,9.3	6,12
	16,18					

LYCLXZ-5875 PowerPlex® Fusion 6C (KInCALc)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	22,27.2	9.3	6,12
	16,18					

M6VCVF-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X,X	10,12
	26			22,27.2	9.3	6,12
	16,18	NM			NM	

TABLE 1

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

Item 1 - STR Results

MCXGQ6-5870 PowerPlex® Fusion

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

MQHZ68-5870 PowerPlex® Fusion (Popstats)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

N9TAJD-5870 GlobalFiler™ (Standalone Popstats 9.0)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	

NDQTMW-5875 PowerPlex® Fusion 6C (Laboratory Specific Software)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	22,27.2	9.3	6,12
	16,18	NR	NR	NR		

NG72BV-5870 PowerPlex® Fusion 6C

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26	12,13	8,11	22,27.2	9.3,9.3	6,12
	16,18					

P2NRMX-5870 PowerPlex® Fusion (Gene Analysen)

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32		X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

TABLE 1

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

Item 1 - STR Results

P4FQ2V-5875 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26			22,27.2	9.3	6,12
	16,18					

PRY4QA-5870 GlobalFiler™ (PopStats)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	

QAGHMY-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26			22,27.2	9.3	6,12
	16,18					

QF4DKV-5870 GlobalFiler™, ForenSeq

	13,17	23,23	11,11	15,16	11,12	11,13
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26	12,13	8,11	22,27.2	9.3,9.3	6,12
	16,18	NR	NR	NR	NR	

QGHK7D-5870 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	

QREMA8-5870 PowerPlex® Fusion 5C

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

TABLE 1

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

Item 1 - STR Results

RBM6WW-5870 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					

RU2KHX-5870 PowerPlex® Fusion 5C

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

RZRWB9-5870 GlobalFiler™ (FBI Popstats Pop.Database)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	-			-	

T2XVRZ-5870 PowerPlex® Fusion

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18					

TK9T64-5875 GlobalFiler™

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	No Results			No Results	

TRTNAE-5870 PowerPlex® 21

	13,17	23,23		15,16	11,12	11,13
	8,11	13,15		16,18	10,11	9,13
1	13,13	14,14.2	31.2,32		X,X	10,12
	26,26	12,13	8,11		9.3,9.3	6,12
	16,18					

TABLE 1

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

Item 1 - STR Results

U386FQ-5875 GlobalFiler™

	13,17	23	11	15,16	11,12	11,13
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	22,27.2	9.3	6,12
	16,18					

U4ZYBA-5870 GlobalFiler™ (Popstats)

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	---			---	

UBXQJ4-5875 GlobalFiler™, MiniFiler

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	no result			no result	

ULXG3P-5870 PowerPlex® Fusion

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18	NR				

URQLVU-5870 GlobalFiler™ Express

	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					

VC98WT-5870 PowerPlex® Fusion 6C

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	22,27.2	9.3	6,12
	16,18					

TABLE 1

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

Item 1 - STR Results

VY3YDP-5875 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26			22,27.2	9.3	6,12
	16,18					

W7F8ER-5870 PowerPlex® Fusion

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18	NR				

W8TZ9T-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26			22,27.2	9.3	6,12
	16,18					

WPDQ9T-5870 PowerPlex® 21 (Kinship (proprietary))

	13,17	23,23		15,16	11,12	11,13
	8,11	13,15		16,18	10,11	9,13
1	13,13	14,14.2	31.2,32		X,X	10,12
	26,26	12,13	8,11		9.3,9.3	6,12
	16,18					

XDUDN4-5870 GlobalFiler™ Express

	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X,X	10,12
	26			22,27.2	9.3	6,12
	16,18	NM			NM	

XE9ZZQ-5875 PowerPlex® 5C

	13,17	23	11	15,16	11,12	--
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11	--	9.3	6,12
	16,18	--	--	--	--	

TABLE 1

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

Item 1 - STR Results

ZCRPX4-5870	PowerPlex® Fusion					
	13,17	23	11	15,16	11,12	
	8,11	13,15	14	16,18	10,11	9,13
1	13	14,14.2	31.2,32	15,16	X	10,12
	26	12,13	8,11		9.3	6,12
	16,18	Inconclusive				
ZN6PUW-5870	GlobalFiler™					
	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18	Not Detected			Not Detected	
ZTJM2J-5875	GlobalFiler™ (Familias3)					
	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					
ZUV3VK-5870	GlobalFiler™					
	13,17	23,23	11,11	15,16	11,12	
	8,11	13,15	14,14	16,18	10,11	9,13
1	13,13	14,14.2	31.2,32	15,16	X,X	10,12
	26,26			22,27.2	9.3,9.3	6,12
	16,18					

TABLE 1

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

Item 2 - STR Results

2K6TQN-5870 PowerPlex® Fusion 6C

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					

2N3EDK-5875 GlobalFiler™ Express

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

6BJ4CX-5870 GlobalFiler™ (CODIS Popstats)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	--			--	

6FZCYX-5875 PowerPlex® Fusion 5C (eDNA)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

6JDCWN-5870 PowerPlex® Fusion (Popstats)

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

6UYDCY-5870 GlobalFiler™

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	--			--	

TABLE 1

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

Item 2 - STR Results

6V8NBM-5870 PowerPlex® Fusion 5C (PopStats)

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

6W2BMR-5870 PowerPlex® Fusion 5C

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17	ND				

6XFKZX-5870 GlobalFiler™ Express

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	NM			NM	

7B3ABN-5870 PowerPlex® Fusion (FBI Popstats)

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

8UDG7G-5870 GlobalFiler™ Express

	13	19,23	10,11	15,16	11,12	NT
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	NT	NT	21.2,22	6,9.3	6,11
	16,17	NR	NT	NT	NR	

9279QF-5870 PowerPlex® Fusion 6C

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					

TABLE 1

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

Item 2 - STR Results

9DFT9M-5875	PowerPlex® Fusion 6C					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					
A2KYBK-5870	PowerPlex® Fusion (PopStats in CODIS 11.0)					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					
A7C7UT-5870	GlobalFiler™ Express					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	NM			NM	
A9468Q-5870	GlobalFiler™ Express					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	NM			NM	
ADDJRB-5875	GlobalFiler™ Express					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					
AJZ9CK-5870	PowerPlex® Fusion (Popstats)					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

TABLE 1

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

Item 2 - STR Results

ALR62E-5870 PowerPlex® Fusion 6C (Familias v 3.3.1)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					

ATM83Q-5870 GlobalFiler™ (CODIS popstats)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

B6EBQG-5870 PowerPlex® Fusion (Popstats)

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

BFYMZ9-5870 PowerPlex® F6C

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17	-	-	-		

BKC6GP-5870 GlobalFiler™ (PopStats)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

BLNZ2W-5870 PowerPlex®

	13,13	19,23		15,16	11,12	13,20
	8,10	13,13		18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2		X,X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

TABLE 1

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

Item 2 - STR Results

BP8YEQ-5870 GlobalFiler™ (PopStats)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

CCDXFV-5870 PowerPlex® 21

	13,13	19,23		15,16	11,12	13,20
	8,10	13,13		18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2		X,X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

D6QRU9-5870 GlobalFiler™ (DNA VIEW)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

DD3QNJ-5875 GlobalFiler™

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	no results			no results	

DHC7X8-5875 PowerPlex® FUSION (GENOPROOF 3)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

DM9RMP-5870 GlobalFiler™

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

TABLE 1

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

Item 2 - STR Results

E3FBXL-5870	GlobalFiler™ (Standalone Popstats)					
	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	
EE9Q4B-5870	GlobalFiler™					
	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,12
	16,17					
EJNYRA-5870	PowerPlex® Fusion 6C					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					
EKVHAH-5870	GlobalFiler™ Express					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	NM			NM	
EZBJ79-5870	PowerPlex® Fusion					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17	NR				
FFJU9L-5870	GlobalFiler™ Express					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	NM			NM	

TABLE 1

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

Item 2 - STR Results

GBJ66J-5870 GlobalFiler™ (Popstats)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

GGB9FB-5870 GlobalFiler™ Express

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

GMDLUK-5875 PowerPlex® 21

	13	19,23		15,16	11,12	13,20
	8,10	13		18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2		X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

GT4W4J-5870 GlobalFiler™ Express

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	NM			NM	

GWJ4RJ-5870 GlobalFiler™

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

H6ENA6-5875 Investigator ESSplex SE QS KIT (GeneMapper Software 5)

	13,13	19,23	10,11	15,16		
		13,13	13,14	18,19		9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	
	21,26			21.2,22	6,9.3	
	16,17					

TABLE 1

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

Item 2 - STR Results

H8FMDJ-5870 Identifiler® plus (local/state software)

		19,23		15,16	11,12	
	8,10	13,13			8,10	9,13
2	13,16	14.2,15.2	30.2,31.2		X,X	10,12
	21,26				6,9.3	6,11
	16,17					

HHY4D4-5870 GlobalFiler™ (DNA View 37.11)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

HLYE94-5875 VeriFiler Express (GeneMapper ID-X v1.6)

	13,13	19,23	10,11	15,16	11,12	13,20
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

HPKWQN-5870 GlobalFiler™

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

JPRVX3-5870 GlobalFiler™

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	NR			NR	

JQAPYD-5870 PowerPlex® Fusion (Popstats)

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

TABLE 1

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

Item 2 - STR Results

KHUL84-5870	PowerPlex® 21					
	13,13	19,23		15,16	11,12	13,20
	8,10	13,13		18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2		X,X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					
L3CXUZ-5870	PowerPlex® Fusion, iPLEXSTR					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					
L6FPLD-5870	GlobalFiler™					
	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					
LRFQXG-5870	Identifiler® Direct					
		19,23		15,16	11,12	
	8,10	13,13			8,10	9,13
2	13,16	14.2,15.2	30.2,31.2		X,X	10,12
	21,26				6,9.3	6,11
	16,17					
LYCLXZ-5875	PowerPlex® Fusion 6C (KInCALc)					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					
M6VCVF-5870	GlobalFiler™ Express					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	NM			NM	

TABLE 1

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

Item 2 - STR Results

MCXGQ6-5870 PowerPlex® Fusion

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

MQHZ68-5870 PowerPlex® Fusion (Popstats)

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

N9TAJD-5870 GlobalFiler™ (Standalone Popstats 9.0)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

NDQTMW-5875 PowerPlex® Fusion 6C (Laboratory Specific Software)

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17	NR	NR	NR		

NG72BV-5870 PowerPlex® FUSION 6C

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					

P2NRMX-5870 PowerPlex® Fusion (Gene Analysen)

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2		X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

TABLE 1

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

Item 2 - STR Results

P4FQ2V-5875 GlobalFiler™ Express

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

PRY4QA-5870 GlobalFiler™ (PopStats)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

QAGHMY-5870 GlobalFiler™ Express

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

QF4DKV-5870 GlobalFiler™, ForenSeq

	13,13	19,23	10,11	15,16	11,12	13,20
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17	NR	NR	NR	NR	

QGHK7D-5870 GlobalFiler™

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

QREMA8-5870 PowerPlex® Fusion 5C

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

TABLE 1

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

Item 2 - STR Results

RBM6WW-5870 GlobalFiler™

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

RU2KHX-5870 PowerPlex® Fusion 5C

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

RZRWB9-5870 GlobalFiler™ (FBI Popstats Pop.Database)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	-			-	

T2XVRZ-5870 PowerPlex® Fusion

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

TK9T64-5875 GlobalFiler™

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	No Results			No Results	

TRTNAE-5870 PowerPlex® 21

	13,13	19,23		15,16	11,12	13,20
	8,10	13,13		18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2		X,X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

TABLE 1

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

Item 2 - STR Results

U386FQ-5875 GlobalFiler™

	13	19,23	10,11	15,16	11,12	13,20
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					

U4ZYBA-5870 GlobalFiler™ (Popstats)

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	---			---	

UBXQJ4-5875 GlobalFiler™, MiniFiler

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	no result			no result	

ULXG3P-5870 PowerPlex® Fusion

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17	NR				

URQLVU-5870 GlobalFiler™ Express

	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

VC98WT-5870 PowerPlex® Fusion 6C

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	21.2,22	6,9.3	6,11
	16,17					

TABLE 1

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

Item 2 - STR Results

VY3YDP-5875 GlobalFiler™ Express

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

W7F8ER-5870 PowerPlex® Fusion

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17	NR				

W8TZ9T-5870 GlobalFiler™ Express

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

WPDQ9T-5870 PowerPlex® 21 (Kinship (proprietary))

	13,13	19,23		15,16	11,12	13,20
	8,10	13,13		18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2		X,X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17					

XDUDN4-5870 GlobalFiler™ Express

	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	NM			NM	

XE9ZZQ-5875 PowerPlex® 5C

	13	19,23	10,11	15,16	11,12	--
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14	--	6,9.3	6,11
	16,17	--	--	--	--	

TABLE 1

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

Item 2 - STR Results

ZCRPX4-5870	PowerPlex® Fusion					
	13	19,23	10,11	15,16	11,12	
	8,10	13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X	10,12
	21,26	11,12	11,14		6,9.3	6,11
	16,17	Inconclusive				
ZN6PUW-5870	GlobalFiler™					
	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17	Not Detected			Not Detected	
ZTJM2J-5875	GlobalFiler™					
	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					
ZUV3VK-5870	GlobalFiler™					
	13,13	19,23	10,11	15,16	11,12	
	8,10	13,13	13,14	18,19	8,10	9,13
2	13,16	14.2,15.2	30.2,31.2	11,16	X,X	10,12
	21,26			21.2,22	6,9.3	6,11
	16,17					

TABLE 1

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

Item 3 - STR Results

2K6TQN-5870 PowerPlex® Fusion 6C

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		

2N3EDK-5875 GlobalFiler™ Express

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

6BJ4CX-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

6FZCYX-5875 PowerPlex® Fusion 5C (eDNA)

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

6JDCWN-5870 PowerPlex® Fusion

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

6UYDCY-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

TABLE 1

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

Item 3 - STR Results

6V8NBM-5870 PowerPlex® Fusion 5C

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

6W2BMR-5870 PowerPlex® Fusion 5C (BP Brutus)

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

6XFKZX-5870 GlobalFiler™ Express

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

7B3ABN-5870 PowerPlex® Fusion

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

8UDG7G-5870 GlobalFiler™ Express

	12,16	23,25	14,15	15	11,12	NT
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	NT	NT	24.2,30.2	7,9	8,9
	17,18	10	NT	NT	2	

9279QF-5870 PowerPlex® Fusion 6C

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		

TABLE 1

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

Item 3 - STR Results

9DFT9M-5875	PowerPlex® Fusion 6C					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		
A2KYBK-5870	PowerPlex® Fusion					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				
A7C7UT-5870	GlobalFiler™ Express					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	
A9468Q-5870	GlobalFiler™ Express					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	
ADDJRB-5875	GlobalFiler™ Express					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	
AJZ9CK-5870	PowerPlex® Fusion					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

TABLE 1

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

Item 3 - STR Results

ALR62E-5870 PowerPlex® Fusion 6C (Familias v 3.3.1)

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		

ATM83Q-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

B6EBQG-5870 PowerPlex® Fusion

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

BFYMZ9-5870 PowerPlex® F6C

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		

BKC6GP-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

BLNZ2W-5870 PowerPlex® (Kinship (paternity trio))

	12,16	23,25		15,15	11,12	14,20
	10,10	11,13		18,22	13,14	9,11
3	15,16	13,13	28,32.2		X,Y	12,12
	23,27	9,11	11,21		7,9	8,9
	17,18					

TABLE 1

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

Item 3 - STR Results

BP8YEQ-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

CCDXFV-5870 PowerPlex® 21 (Kinship (Paternity Trio Module))

	12,16	23,25		15,15	11,12	14,20
	10,10	11,13		18,22	13,14	9,11
3	15,16	13,13	28,32.2		X,Y	12,12
	23,27	9,11	11,21		7,9	8,9
	17,18					

D6QRU9-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

DD3QNJ-5875 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

DHC7X8-5875 PowerPlex® FUSION (GENOPROOF 3)

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

DM9RMP-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

TABLE 1

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

Item 3 - STR Results

E3FBXL-5870	GlobalFiler™					
	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	
EE9Q4B-5870	GlobalFiler™					
	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	
EJNYRA-5870	PowerPlex® Fusion 6C					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		
EKVHAH-5870	GlobalFiler™ Express					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	
EZBJ79-5870	PowerPlex® Fusion					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				
FFJU9L-5870	GlobalFiler™ Express					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

TABLE 1

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

Item 3 - STR Results

GBJ66J-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

GGB9FB-5870 GlobalFiler™ Express

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

GMDLUK-5875 PowerPlex® 21

	12,16	23,25		15	11,12	14,20
	10	11,13		18,22	13,14	9,11
3	15,16	13	28,32.2		X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18					

GT4W4J-5870 GlobalFiler™ Express

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

GWJ4RJ-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

H6ENA6-5875 Investigator ESSplex SE QS KIT (GeneMapper Software 5)

	12,16	23,25	14,15	15,15		
		11,13	12,13	18,22		9,11
3	15,16	13,13	28,32.2	16,16	X,Y	
	23,27			24.2,30.2	7,9	
	17,18					

TABLE 1

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

Item 3 - STR Results

H8FMDJ-5870 Identifiler® plus (local/state software)

		23,25		15,15	11,12	
	10,10	11,13			13,14	9,11
3	15,16	13,13	28,32.2		X,Y	12,12
	23,27				7,9	8,9
	17,18					

HHY4D4-5870 GlobalFiler™ (DNA View 37.11)

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

HLYE94-5875 VeriFiler Express (GeneMapper ID-X v1.6)

	12,16	23,25	14,15	15,15	11,12	14,20
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27	9,11	11,21		7,9	8,9
	17,18				2	

HPKWQN-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

JPRVX3-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

JQAPYD-5870 PowerPlex® Fusion

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

TABLE 1

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

Item 3 - STR Results

KHUL84-5870	PowerPlex® 21					
	12,16	23,25		15,15	11,12	14,20
	10,10	11,13		18,22	13,14	9,11
3	15,16	13,13	28,32.2		X,Y	12,12
	23,27	9,11	11,21		7,9	8,9
	17,18					
L3CXUZ-5870	PowerPlex® Fusion, iPLEXSTR					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10				
L6FPLD-5870	GlobalFiler™					
	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	
LRFQXG-5870	Identifiler® Direct					
		23,25		15,15	11,12	
	10,10	11,13			13,14	9,11
3	15,16	13,13	28,32.2		X,Y	12,12
	23,27				7,9	8,9
	17,18					
LYCLXZ-5875	PowerPlex® Fusion 6C					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		
M6VCVF-5870	GlobalFiler™ Express					
	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

TABLE 1

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

Item 3 - STR Results

MCXGQ6-5870 PowerPlex® Fusion

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

MQHZ68-5870 PowerPlex® Fusion (Popstats)

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

N9TAJD-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

NDQTMW-5875 PowerPlex® Fusion 6C (Laboratory Specific Software)

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		

NG72BV-5870 PowerPlex® FUSION 6C

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		

P2NRMX-5870 PowerPlex® Fusion (Gene Analysen)

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2		X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

TABLE 1

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

Item 3 - STR Results

P4FQ2V-5875 GlobalFiler™ Express

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

PRY4QA-5870 GlobalFiler™ (PopStats)

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

QAGHMY-5870 GlobalFiler™ Express

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

QF4DKV-5870 GlobalFiler™, ForenSeq (DNAview)

	12,16	23,25	14,15	15,15	11,12	14,20
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17	2	

QGHK7D-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

QREMA8-5870 PowerPlex® Fusion 5C

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

TABLE 1

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

Item 3 - STR Results

RBM6WW-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

RU2KHX-5870 PowerPlex® Fusion 5C

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

RZRWB9-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

T2XVRZ-5870 PowerPlex® Fusion

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

TK9T64-5875 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

TRTNAE-5870 PowerPlex® 21

	12,16	23,25		15,15	11,12	14,20
	10,10	11,13		18,22	13,14	9,11
3	15,16	13,13	28,32.2		X,Y	12,12
	23,27	9,11	11,21		7,9	8,9
	17,18					

TABLE 1

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

Item 3 - STR Results

U386FQ-5875 GlobalFiler™

	12,16	23,25	14,15	15	11,12	14,20
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10			2	

U4ZYBA-5870 GlobalFiler™ (Popstats)

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

UBXQJ4-5875 GlobalFiler™, MiniFiler

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

ULXG3P-5870 PowerPlex® Fusion

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

URQLVU-5870 GlobalFiler™ Express

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

VC98WT-5870 PowerPlex® Fusion 6C

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	24.2,30.2	7,9	8,9
	17,18	10	16	17		

TABLE 1

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

Item 3 - STR Results

VY3YDP-5875 GlobalFiler™ Express

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

W7F8ER-5870 PowerPlex® Fusion

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	10				

W8TZ9T-5870 GlobalFiler™ Express

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

WPDQ9T-5870 PowerPlex® 21 (Kinship (proprietary))

	12,16	23,25		15,15	11,12	14,20
	10,10	11,13		18,22	13,14	9,11
3	15,16	13,13	28,32.2		X,Y	12,12
	23,27	9,11	11,21		7,9	8,9
	17,18					

XDUDN4-5870 GlobalFiler™ Express

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

XE9ZZQ-5875 PowerPlex® 5C

	12,16	23,25	14,15	15	11,12	--
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21	--	7,9	8,9
	17,18	10	--	--	--	

TABLE 1

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

Item 3 - STR Results

ZCRPX4-5870 PowerPlex® Fusion (DNAview)

	12,16	23,25	14,15	15	11,12	
	10	11,13	12,13	18,22	13,14	9,11
3	15,16	13	28,32.2	16	X,Y	12
	23,27	9,11	11,21		7,9	8,9
	17,18	Inconclusive				

ZN6PUW-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

ZTJM2J-5875 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10			2	

ZUV3VK-5870 GlobalFiler™

	12,16	23,25	14,15	15,15	11,12	
	10,10	11,13	12,13	18,22	13,14	9,11
3	15,16	13,13	28,32.2	16,16	X,Y	12,12
	23,27			24.2,30.2	7,9	8,9
	17,18	10	16	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 4 - STR Results

2K6TQN-5870 PowerPlex® Fusion 6C (Popstats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11
	17,19	10	17	17		

2N3EDK-5875 GlobalFiler™ Express

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

6BJ4CX-5870 GlobalFiler™ (CODIS Popstats)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

6FZCYX-5875 PowerPlex® 5C (eDNA)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

6JDCWN-5870 PowerPlex® Fusion (Popstats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

6UYDCY-5870 GlobalFiler™ (PopStats)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

TABLE 1

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

Item 4 - STR Results

6V8NBM-5870 PowerPlex® Fusion 5C (PopStats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

6W2BMR-5870 PowerPlex® Fusion 5C (BP Brutus)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11,11
	17,19	10				

6XFKZX-5870 GlobalFiler™ Express

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

7B3ABN-5870 PowerPlex® Fusion (FBI Popstats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

8UDG7G-5870 GlobalFiler™ Express

	13,15	19,23	10,11	16	12	NT
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	NT	NT	21.2,29.2	6,7	11
	17,19	10	NT	NT	2	

9279QF-5870 PowerPlex® Fusion 6C

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11
	17,19	10	17	17		

TABLE 1

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

Item 4 - STR Results

9DFT9M-5875	PowerPlex® Fusion 6C					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11
	17,19	10	17	17		
A2KYBK-5870	PowerPlex® Fusion (PopStats in CODIS 11.0)					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				
A7C7UT-5870	GlobalFiler™ Express					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	
A9468Q-5870	GlobalFiler™ Express					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	
ADDJRB-5875	GlobalFiler™ Express					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	
AJZ9CK-5870	PowerPlex® Fusion (Popstats)					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

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 4 - STR Results

ALR62E-5870 PowerPlex® Fusion 6C (Familias v 3.3.1)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11,11
	17,19	10	17	17		

ATM83Q-5870 GlobalFiler™ (CODIS popstats)

	13,15	19,23	10,11	16,16	12,12	-
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	-	-	21.2,29.2	6,7	11,11
	17,19	10	-	-	2	

B6EBQG-5870 PowerPlex® Fusion (Popstats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

BFYMZ9-5870 PowerPlex® F6C

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11,11
	17,19	10	17	17		

BKC6GP-5870 GlobalFiler™ (PopStats)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

BLNZ2W-5870 PowerPlex® (Kinship (paternity trio))

	13,15	19,23		16,16	12,12	12,20
	10,11	12,13		15,19	8,12	11,13
4	16,16	13,15.2	28,30.2		X,Y	10,12
	21,22	11,14	13,14		6,7	11,11
	17,19					

TABLE 1

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

Item 4 - STR Results

BP8YEQ-5870 GlobalFiler™ (PopStats)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

CCDXFV-5870 PowerPlex® 21 (Kinship (Paternity Trio Module))

	13,15	19,23		16,16	12,12	12,20
	10,11	12,13		15,19	8,12	11,13
4	16,16	13,15.2	28,30.2		X,Y	10,12
	21,22	11,14	13,14		6,7	11,11
	17,19					

D6QRU9-5870 GlobalFiler™ (DNA VIEW)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

DD3QNJ-5875 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

DHC7X8-5875 PowerPlex® FUSION (GENOPROOF 3)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11,11
	17,19	10				

DM9RMP-5870 GlobalFiler™ (FBI Popstats)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

TABLE 1

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

Item 4 - STR Results

E3FBXL-5870	GlobalFiler™ (Standalone Popstats)					
	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	
EE9Q4B-5870	GlobalFiler™					
	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	
EJNYRA-5870	PowerPlex® Fusion 6C					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11
	17,19	10	17	17		
EKVHAH-5870	GlobalFiler™					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	
EZBJ79-5870	PowerPlex® Fusion					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				
FFJU9L-5870	GlobalFiler™ Express					
	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

TABLE 1

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

Item 4 - STR Results

GBJ66J-5870 GlobalFiler™ (Popstats)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

GGB9FB-5870 GlobalFiler™ Express (FBI Popstats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

GMDLUK-5875 PowerPlex® 21

	13,15	19,23		16	12	12,20
	10,11	12,13		15,19	8,12	11,13
4	16	13,15.2	28,30.2		X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19					

GT4W4J-5870 GlobalFiler™ Express

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

GWJ4RJ-5870 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

H6ENA6-5875 Investigator ESSplex SE QS KIT (GeneMapper Software 5)

	13,15	19,23	10,11	16,16		
		12,13	13,16	15,19		11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	
	21,22			21.2,29.2	6,7	
	17,19					

TABLE 1

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

Item 4 - STR Results

H8FMDJ-5870 Identifiler® plus (local/state software)

		19,23		16,16	12,12	
	10,11	12,13			8,12	11,13
4	16,16	13,15.2	28,30.2		X,Y	10,12
	21,22				6,7	11,11
	17,19					

HHY4D4-5870 GlobalFiler™ (DNA View 37.11)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

HLYE94-5875 VeriFiler Express (GeneMapper ID-X v1.6)

	13,15	19,23	10,11	16,16	12,12	12,20
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11,11
	17,19				2	

HPKWQN-5870 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

JPRVX3-5870 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

JQAPYD-5870 PowerPlex® Fusion (Popstats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

TABLE 1

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

Item 4 - STR Results

KHUL84-5870 PowerPlex® 21

	13,15	19,23		16,16	12,12	12,20
	10,11	12,13		15,19	8,12	11,13
4	16,16	13,15.2	28,30.2		X,Y	10,12
	21,22	11,14	13,14		6,7	11,11
	17,19					

L3CXUZ-5870 PowerPlex® Fusion, iPLEXSTR

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11
	17,19	10				

L6FPLD-5870 GlobalFiler™ (Popstats)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

LRFQXG-5870 Identifiler® Direct

		19,23		16,16	12,12	
	10,11	12,13			8,12	11,13
4	16,16	13,15.2	28,30.2		X,Y	10,12
	21,22				6,7	11,11
	17,19					

LYCLXZ-5875 PowerPlex® Fusion 6C (KInCALc)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11
	17,19	10	17	17		

M6VCVF-5870 GlobalFiler™ Express

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

TABLE 1

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

Item 4 - STR Results

MCXGQ6-5870 PowerPlex® Fusion

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

MQHZ68-5870 PowerPlex® Fusion (Popstats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

N9TAJD-5870 GlobalFiler™ (Standalone Popstats 9.0)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

NDQTMW-5875 PowerPlex® Fusion 6C (Laboratory Specific Software)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11
	17,19	10	17	17		

NG72BV-5870 PowerPlex® FUSION 6C

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11,11
	17,19	10	17	17		

P2NRMX-5870 PowerPlex® Fusion (Gene Analysen)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2		X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

TABLE 1

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

Item 4 - STR Results

P4FQ2V-5875 GlobalFiler™ Express

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

PRY4QA-5870 GlobalFiler™ (PopStats)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

QAGHMY-5870 GlobalFiler™ Express (Popstats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

QF4DKV-5870 GlobalFiler™, ForenSeq (DNAview)

	13,15	19,23	10,11	16,16	12,12	12,20
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11,11
	17,19	10	17	17	2	

QGHK7D-5870 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

QREMA8-5870 PowerPlex® Fusion 5C

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

TABLE 1

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

Item 4 - STR Results

RBM6WW-5870 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

RU2KHX-5870 PowerPlex® Fusion 5C

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

RZRWB9-5870 GlobalFiler™ (FBI Popstats Pop. Database)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

T2XVRZ-5870 PowerPlex® Fusion

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

TK9T64-5875 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

TRTNAE-5870 PowerPlex® 21

	13,15	19,23		16,16	12,12	12,20
	10,11	12,13		15,19	8,12	11,13
4	16,16	13,15.2	28,30.2		X,Y	10,12
	21,22	11,14	13,14		6,7	11,11
	17,19					

TABLE 1

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

Item 4 - STR Results

U386FQ-5875 GlobalFiler™

	13,15	19,23	10,11	16	12	12,20
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11
	17,19	10			2	

U4ZYBA-5870 GlobalFiler™ (Popstats)

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

UBXQJ4-5875 GlobalFiler™, MiniFiler

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

ULXG3P-5870 PowerPlex® Fusion

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

URQLVU-5870 GlobalFiler™ Express

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

VC98WT-5870 PowerPlex® Fusion 6C (Popstats)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	21.2,29.2	6,7	11
	17,19	10	17	17		

TABLE 1

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

Item 4 - STR Results

VY3YDP-5875 GlobalFiler™ Express

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

W7F8ER-5870 PowerPlex® Fusion

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	10				

W8TZ9T-5870 GlobalFiler™ Express

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

WPDQ9T-5870 PowerPlex® 21 (Kinship (proprietary))

	13,15	19,23		16,16	12,12	12,20
	10,11	12,13		15,19	8,12	11,13
4	16,16	13,15.2	28,30.2		X,Y	10,12
	21,22	11,14	13,14		6,7	11,11
	17,19					

XDUDN4-5870 GlobalFiler™ Express

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11
	17,19	10			2	

XE9ZZQ-5875 PowerPlex® 5C

	13,15	19,23	10,11	16	12	--
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14	--	6,7	11
	17,19	10	--	--	--	

TABLE 1

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

Item 4 - STR Results

ZCRPX4-5870 PowerPlex® Fusion (DNAview)

	13,15	19,23	10,11	16	12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22	11,14	13,14		6,7	11
	17,19	Inconclusive				

ZN6PUW-5870 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

ZTJM2J-5875 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10			2	

ZUV3VK-5870 GlobalFiler™

	13,15	19,23	10,11	16,16	12,12	
	10,11	12,13	13,16	15,19	8,12	11,13
4	16,16	13,15.2	28,30.2	11,15	X,Y	10,12
	21,22			21.2,29.2	6,7	11,11
	17,19	10	17	17	2	

Paternity Index Results

TABLE 2

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

Item 3PI - Paternity Index Results

6FZCYX-5875	FBI PopStats					
	0.0000	0.0000	0.0000	1.4463	1.4000	
	3.2658	1.5380	1.8295	0.0000	0.0000	2.7732
3PI	4.3178	0.0000	0.0000	0.0000		1.5482
	0.0000	3.5211	0.0000		0.0000	0.0000
	2.2553					
6W2BMR-5870	NIST-STRBASE					
	0.00	0.00	0.00	1.62	1.35	
	3.18	1.77	1.84	NR	0.00	1.71
3PI	3.85	0.00	0.00	0.00		1.59
	0.00	3.15	0.00		0.00	0.00
	2.03					
6XFKZX-5870	NIST-STRBASE					
	0.0028	0.001	0.0028	1.66	1.37	
	3.26	1.83	1.83	0.0028	0.002	1.83
3PI	4	0.001	0.001	0.0028		1.63
	0.00413			0.00641	0.00001	0.00014
	2.03					
A9468Q-5870	NIST-STRBASE					
	0.0028	0.0010	0.0028	1.6619	1.3721	
	3.2552	1.8294	1.8294	0.0028	0.0020	1.8294
3PI	4.0000	0.0010	0.0010	0.0028		1.6331
	0.0041			0.0064	0.0000	0.0001
	2.0341					
ALR62E-5870	NIST-STRBASE					
	0	0	0	1.6619	1.3722	
	3.2552	1.8293	1.8295	0	0	1.8293
3PI	3.9996	0	0	0		1.6332
	0	3.2189	0	0	0	0
	2.0342					
BFYMZ9-5870	NIST-STRBASE					
	0	0	0	1.66	1.37	
	3.25	1.82	1.82	0	0	1.82
3PI	4.00	0	0	0		1.63
	0	9.21	0	0	0	0
	2.03					
BLNZ2W-5870	NIST-STRBASE					
	0	0		1.6620	1.3721	15.7233
	3.2552	1.8295		0	0	1.8295
3PI	4.0000	0	0			1.6332
	0	3.1888	0		0	0
	2.0342					

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

CCDXFV-5870	NIST-STRBASE					
	0	0		1.6620	1.3721	15.7233
	3.2552	1.8295		0	0	1.8295
3PI	4.0000	0	0			1.6332
	0	3.1888	0		0	0
	2.0342					
DD3QNJ-5875	NIST-STRBASE					
	0.000	0.000	0.000	1.62	1.35	
	3.18	1.77	1.84	0.000	0.000	1.71
3PI	3.85	0.000	0.000	0.000		1.60
	0.000			0.000	0.000	0.000
	2.04					
EE9Q4B-5870	[Location Identifying Database]					
	0.00	0.00	0.00	1.93	1.41	
	4.05	1.66	1.71	0.00	0.00	1.70
3PI	4.40	0.00	0.00	0.00		1.71
	0.00			0.00	0.00	0.00
	1.97					
EKVHAH-5870	NIST-STRBASE					
	0.0028	0.001	0.0028	1.6619	1.3721	
	3.2552	1.8294	1.8294	0.0028	0.002	1.8294
3PI	4	0.001	0.001	0.0028		1.6331
	0.0041			0.0064	0	0.0001
	2.0341					
FFJU9L-5870	NIST-STRBASE					
	0.0028	0.0010	0.0028	1.6619	1.3721	
	3.2552	1.8294	1.8294	0.0028	0.0020	1.8294
3PI	4.0000	0.0010	0.0010	0.0028		1.6331
	0.0041			0.0064	0.00001	0.0001
	2.0341					
GMDLUK-5875	NIST-STRBASE					
	0.00437	0.00000324		1.66	1.37	15.7
	3.26	1.83		0.00331	0.000000454	1.83
3PI	4.00	0.00200	0.00215			1.63
	0.000328	3.22	0.0000868		0.00209	0.000197
	2.03					
GT4W4J-5870	NIST-STRBASE					
	0.0028	0.0010	0.0028	1.6619	1.3721	
	3.2552	1.8294	1.8294	0.0028	0.0020	1.8294
3PI	4.0000	0.0010	0.0010	0.0028		1.6331
	0.0041			0.0064	0.0000	0.0001
	2.0341					

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

H6ENA6-5875 laboratory specific database

	0	0	0	2.072		
		1.533	1.622	0		1.687
3PI	3.327	0	0	0		
	0			0	0	
	1.752					

HHY4D4-5870 [Location Identifying Database]

	0	0	0	1.494286	1.403399	
	3.799031	1.679872	1.881295	0	0	2.314159
3PI	3.9225	0	0	0		1.629283
	0			0	0	0
	1.778912					

HLYE94-5875 NIST-STRBASE

	0	0	0	1.66	1.37	15.72
	3.26	1.83	1.83	0	0	1.83
3PI	4.00	0	0	0		1.63
	0	3.22	0		0	0
	2.03					

L3CXUZ-5870 NIST-STRBASE

	0	0	0	1.66	1.37	
	3.26	1.83	1.83	0	0	1.83
3PI	4.00	0	0	0		1.63
	0	3.22	0	0	0	0
	2.03					

LRFQXG-5870 Hispanic

				1.5184	1.4609	
	3.6483	1.5184				2.3969
3PI	4.2662					1.5934
	2.3202					

M6VCVF-5870 NIST-STRBASE

	0.0028	0.0012	0.0028	1.6620	1.3721	
	3.2552	1.8295	1.8295	0.0028	0.0019	1.8295
3PI	4.0000	0.0011	0.0022	0.0028		1.6332
	0.0048			0.0064	0.0007	0.0007
	2.0342					

NDQTMW-5875 laboratory specific database

	0.000	0.000	0.000	1.446	1.407	
	3.266	1.548	2.049	0.000	0.000	2.787
3PI	4.355	0.000	0.000	0.000		1.548
	0.000	3.602	0.000	0.000	0.000	0.000
	2.223					

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

P2NRMX-5870 NIST-STRBASE

	0.00	0.00	0.00	1.66	1.37	
	3.26	1.81	1.83	0.00	0.00	1.83
3PI	4.00	0.00	0.00			1.63
	0.13	3.22	0.00		0.01	0.00
	2.03					

QAGHMY-5870 FBI PopStats

				1.4463	1.4075	
	3.2658	1.5480	2.0492			2.7871
3PI	4.3554					1.5482
	2.2232					

TK9T64-5875 NIST-STRBASE

	0.000	0.000	0.000	1.62	1.35	
	3.18	1.77	1.84	0.000	0.000	1.71
3PI	3.85	0.000	0.000	0.000		1.60
	0.000			0.000	0.000	0.000
	2.04					

TRTNAE-5870 US SE Hispanic population (FSI:Gen, 25 (2016), 175-181)

	Exclusion	Exclusion				
				Exclusion	Exclusion	
3PI		Exclusion	Exclusion			
	Exclusion		Exclusion		Exclusion	Exclusion

U386FQ-5875 NIST-STRBASE

	0.0000	0.0000	0.0000	1.6620	1.3721	15.7233
	3.2552	1.8295	1.8295	0.0000	0.0000	1.8295
3PI	4.0000	0.0000	0.0000	0.0000		1.6332
	0.0000	3.2196	0.0000	0.0000	0.0000	0.0000
	2.0342					

UBXQJ4-5875 NIST-STRBASE

	0	0	0	1.62	1.35	
	3.18	1.77	1.84	0	0	1.71
3PI	3.85	0	0	0		1.60
	0			0	0	0
	2.04					

W8TZ9T-5870 FBI PopStats

				1.4463	1.4075	
	3.2658	1.5480	2.0492			2.7871
3PI	4.3554					1.5482
	2.2232					

TABLE 2

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

Item 3PI - Paternity Index Results

WPDQ9T-5870 NIST-STRBASE

	0.0	0.0		1.6620	1.3721	15.7233
	3.2552	1.8295		0.0	0.0	1.8295
3PI	4.0000	0.0	0.0			1.6332
	0.0	3.1888	0.0		0.0	0.0
	2.0342					

XDUDN4-5870 NIST-STRBASE

	0.0028	0.0010	0.0028	1.6619	1.3721	
	3.2552	1.8294	1.8294	0.0028	0.0020	1.8294
3PI	4.0000	0.0010	0.0010	0.0028		1.6331
	0.0041			0.0064	0.0000	0.0001
	2.0341					

XE9ZZQ-5875 FBI PopStats, Promega/NIST

	--	--	--	1.44	1.39	--
	3.25	1.53	1.84	--	--	2.71
3PI	4.24	--	--	--		1.54
	--	2.81	--	--	--	--
	2.24					

ZCRPX4-5870 FBI PopStats, Laboratory Specific Database

		0.001		1.53	1.55	
	3.67	1.54			0.002	1.40
3PI	4.01	0.001	0.001			1.63
	0.005	2.81	0.001		0.001	0.0001
	2.18					

ZTJM2J-5875 NIST-STRBASE

	1.7E-04	2.9E-06	6.4E-10	1.9E+00	1.3E+00	
	3.7E+00	1.5E+00	1.6E+00	1.4E-05	5.1E-07	1.7E+00
3PI	3.0E+00	2.2E-07	1.2E-05	1.7E-07		1.7E+00
	2.4E-06			8.5E-09	5.2E-05	1.3E-05
	1.7E+00					

ZUV3VK-5870 FBI PopStats

				1.6620	1.3721	
	3.2552	1.8295	1.8295			1.8295
3PI	4.0000					1.6332
	2.0342					

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

2K6TQN-5870 Popstats NIST 2017

	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295	2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787	3.2196	6.9444	29.586	2.0886	3.9339
	2.0342					

2N3EDK-5875 FBI PopStats

	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700				2.1542	3.6670
	2.2232					

6BJ4CX-5870 FBI PopStats

	5.22	1.91	1.14	1.44	1.40	
	1.63	1.54	2.04	2.06	6.96	2.78
4PI	8.71	5.50	14.92	5.50		1.54
	3.87			41.66	2.15	3.66
	2.22					

6FZCYX-5875 FBI PopStats

	4.3706	1.9186	1.4841	1.4463	1.4000	
	1.6329	1.5380	1.8295	2.6511	7.5188	2.7732
4PI	8.6356	6.1728	15.6250	7.8616		1.5482
	3.8314	3.5211	7.6923		2.1542	3.6670
	2.2553					

6JDCWN-5870 FBI PopStats

	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295		4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787	3.2196	6.9444		2.0886	3.9339
	2.0342					

6UYDCY-5870 FBI PopStats

	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					

6V8NBM-5870 NIST-STRBASE

	4.37	2.59	1.48	1.66	1.37	
	1.63	1.83	1.83		4.54	1.83
4PI	8.00	9.07	21.5	7.86		1.63
	3.28	3.22	6.94		2.09	3.93
	2.03					

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

6W2BMR-5870	NIST-STRBASE					
	3.87	2.56	1.50	1.62	1.35	
	1.64	1.77	1.84	NR	4.33	1.71
4PI	7.17	7.98	15.57	7.06		1.59
	3.20	3.15	6.33		2.09	3.79
	2.03					
6XFKZX-5870	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	
	1.63	1.83	1.83	2.65	4.54	1.83
4PI	8	9.07	21.5	7.86		1.63
	3.28			29.6	2.09	3.93
	2.03					
7B3ABN-5870	FBI PopStats					
	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295		4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787	3.2196	6.9444		2.0886	3.9339
	2.0342					
9279QF-5870	Popstats NIST 2017					
	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295	2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787	3.2196	6.9444	29.586	2.0886	3.9339
	2.0342					
9DFT9M-5875	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700	3.6023	7.4627	41.667	2.1542	3.6670
	2.2232					
A2KYBK-5870	FBI PopStats					
	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295		4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787	3.2196	6.9444		2.0886	3.9339
	2.0342					
A7C7UT-5870	NIST-STRBASE					
	4.3704	2.5934	1.4843	1.6620	1.3721	
	1.6276	1.8295	1.8295	2.6517	4.5385	1.8295
4PI	8.0000	9.0769	21.4545	7.8667		1.6332
	3.2778			29.5000	2.0885	3.9333
	2.0345					

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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A9468Q-5870	NIST-STRBASE					
	4.3706	2.5933	1.4841	1.6619	1.3721	
	1.6276	1.8294	1.8294	2.6511	4.5372	1.8294
4PI	8.0000	9.0744	21.4592	7.8616		1.6331
	3.2786			29.5857	2.0885	3.9339
	2.0341					
ADDJRB-5875	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700				2.1542	3.6670
	2.2232					
AJZ9CK-5870	FBI PopStats					
	4.3706	2.5934	1.4841	1.662	1.3721	
	1.6276	1.8295	1.8295		4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787	3.2196	6.9444		2.0886	3.9339
	2.0342					
ALR62E-5870	NIST-STRBASE					
	4.3697	2.5934	1.4840	1.6619	1.3722	
	1.6276	1.8293	1.8295	2.6516	4.5372	1.8293
4PI	7.9992	9.0735	21.4549	7.8616		1.6332
	3.2777	3.2189	6.9430	29.5769	2.0885	3.9339
	2.0342					
ATM83Q-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
B6EBQG-5870	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	
	1.63	1.83	1.83		4.54	1.83
4PI	8.00	9.07	21.46	7.86		1.63
	3.28	3.22	6.94		2.09	3.93
	2.03					
BFYMZ9-5870	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	
	1.62	1.82	1.82	2.65	4.53	1.82
4PI	8.00	9.07	21.45	7.86		1.63
	3.27	3.21	6.94	29.58	2.08	3.93
	2.03					

TABLE 2

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

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BKC6GP-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
BLNZ2W-5870	NIST-STRBASE					
	4.3706	2.5934		1.6620	1.3721	15.7233
	1.6276	1.8295		2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.4592			1.6332
	3.2787	3.1888	6.9444		2.0886	3.9339
	2.0342					
BP8YEQ-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
CCDXFV-5870	NIST-STRBASE					
	4.3706	2.5934		1.6620	1.3721	15.7233
	1.6276	1.8295		2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.4592			1.6332
	3.2787	3.1888	6.9444		2.0886	3.9339
	2.0342					
D6QRU9-5870	[Location Identifying Population]					
	5.98855	2.25431	1.208783	1.494286	1.403399	
	1.899516	1.679872	1.881295	2.092	6.326613	2.314159
4PI	7.845	5.898496	26.15	9.80625		1.629283
	4.195187			56.03571	1.807604	3.826829
	1.778912					
DD3QNJ-5875	NIST-STRBASE					
	3.87	2.57	1.50	1.62	1.35	
	1.64	1.77	1.84	omitted	4.32	1.71
4PI	7.17	7.97	15.5	7.05		1.60
	3.20			19.2	2.09	3.79
	2.04					
DHC7X8-5875	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	
	1.62	1.82	1.82	2.65	4.53	1.82
4PI	8	9.07	21.4	7.86		1.63
	3.27	3.21	6.94		2.08	3.93
	2.03					

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

DM9RMP-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
E3FBXL-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
EE9Q4B-5870	[Location Identifying Database]					
	7.31	4.00	2.23	1.93	1.41	
	2.02	1.66	1.71	4.09	3.74	1.70
4PI	8.80	12.28	11.23	3.80		1.71
	2.82			26.40	2.02	4.05
	1.97					
EJNYRA-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700	3.6023	7.4627	41.667	2.1542	3.6670
	2.2232					
EKVHAH-5870	NIST-STRBASE					
	4.3706	2.5933	1.4841	1.6619	1.3721	
	1.6276	1.8294	1.8294	2.6511	4.5372	1.8294
4PI	8	9.0744	21.4592	7.8616		1.6331
	3.2786			29.5857	2.0885	3.9339
	2.0341					
EZBJ79-5870	NIST-STRBASE					
	4.3706	2.5933	1.4841	1.6619	1.3721	
	1.6276	1.8294	1.8294	2.6511	4.5372	1.8294
4PI	8.0000	9.0744	21.4592	7.8616		1.6331
	3.2786	3.1887	6.9444		2.0885	3.9339
	2.0341					
FFJU9L-5870	NIST-STRBASE					
	4.3706	2.5933	1.4841	1.6619	1.3721	
	1.6276	1.8294	1.8294	2.6511	4.5372	1.8294
4PI	8.0000	9.0744	21.4592	7.8616		1.6331
	3.2786			29.5857	2.0885	3.9339
	2.0341					

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

GBJ66J-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
GGB9FB-5870	FBI PopStats					
	3.7313	2.7716	1.8657	1.4370	2.0859	
	1.9019	2.4876	1.5645		2.3095	1.1023
4PI	7.7580	4.0420	19.380	2.4876		1.7018
	4.8497			19.380	2.9394	3.4037
	1.5903					
GMDLUK-5875	NIST-STRBASE					
	4.37	2.59		1.66	1.37	15.7
	1.63	1.83		2.65	4.54	1.83
4PI	8.00	9.08	21.5			1.63
	3.28	3.22	6.94		2.09	3.93
	2.03					
GT4W4J-5870	NIST-STRBASE					
	4.3706	2.5933	1.4841	1.6619	1.3721	
	1.6276	1.8294	1.8294	2.6511	4.5372	1.8294
4PI	8.0000	9.0744	21.4592	7.8616		1.6331
	3.2786			29.5857	2.0885	3.9339
	2.0341					
GWJ4RJ-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
H6ENA6-5875	laboratory specific database					
	7.521	4.385	2.375	2.072		
		1.533	1.622	4.011		1.687
4PI	6.655	13.601	9.415	3.574		
	2.925			21.265	2.271	
	1.752					
HHY4D4-5870	[Location Identifying Database]					
	5.98855	2.25431	1.208783	1.494286	1.403399	
	1.899516	1.679872	1.881295	2.092	6.326613	2.314159
4PI	7.845	5.898496	26.15	9.80625		1.629283
	4.195187			56.03571	1.807604	3.826829
	1.778912					

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

HLYE94-5875	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	15.7
	1.63	1.83	1.83	2.65	4.54	1.83
4PI	8.00	9.07	21.5	7.86		1.63
	3.28	3.22	6.94		2.09	3.93
	2.03					
HPKWQN-5870	national database					
	4.9499	3.7193	2.2089	1.8038	1.3692	
	2.0212	1.5772	1.7330	3.7934	3.5134	1.5203
4PI	7.0030	8.8473	8.3311	3.5571		1.6212
	2.7384			13.7446	2.0212	N/A
	1.9724					
JPRVX3-5870	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	
	1.63	1.83	1.83	2.65	4.54	1.83
4PI	8.00	9.08	21.5	7.87		1.63
	3.28			29.5	2.09	3.93
	N/A					
JQAPYD-5870	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	
	1.62	1.82	1.82		4.53	1.82
4PI	8.00	9.07	21.45	7.86		1.63
	3.27	3.21	6.94		2.08	3.93
	2.03					
KHUL84-5870	NIST-STRBASE, Hispanic population allele frequencies					
	4.370	2.593		1.662	1.372	15.73
	1.628	1.829		2.652	4.538	1.829
4PI	8.000	9.077	21.45			1.633
	3.278	3.219	6.941		2.088	3.933
	2.034					
L3CXUZ-5870	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	
	1.63	1.83	1.83	2.65	4.54	1.83
4PI	8.00	9.07	21.46	7.86		1.63
	3.28	3.22	6.94	29.59	2.09	3.93
	2.03					
L6FPLD-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					

TABLE 2

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

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LRFQXG-5870 Hispanic

		2.1968		1.5184	1.4609	
	1.8242	1.5184			5.1760	2.3969
4PI	8.5324	5.6883	17.0648			1.5934
	3.4106				2.1968	3.6711
	2.3202					

LYCLXZ-5875 NIST-STRBASE

	4.3703	2.5934	1.4842	1.6619	1.3720	
	1.6275	1.8294	1.8294	2.6516	4.5384	1.8294
4PI	8.00	9.0769	21.4545	7.8666		1.6332
	3.2777	3.2191	6.9411	29.5	2.0884	3.9333
	NR					

M6VCVF-5870 NIST-STRBASE

	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295	2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.4592	7.8616		1.6332
	3.2787			29.5858	2.0886	3.9339
	2.0342					

MCXGQ6-5870 NIST-STRBASE

	4.37	2.59	1.48	1.66	1.37	
	1.63	1.83	1.83		4.54	1.83
4PI	8.00	9.07	21.5	7.86		1.63
	3.28	3.22	6.94		2.09	3.93
	2.03					

MQHZ68-5870 FBI PopStats

	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295		4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787	3.2196	6.9444		2.0886	3.9339
	2.0342					

N9TAJD-5870 FBI PopStats

	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					

NDQTMW-5875 laboratory specific database

	5.225	1.917	1.148	1.446	1.407	
	1.633	1.548	2.049	2.070	6.964	2.787
4PI	8.711	5.501	14.925	5.501		1.548
	3.870	3.602	7.463	41.667	2.154	3.667
	2.223					

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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P2NRMX-5870	NIST-STRBASE					
	4.37	2.59	1.48	1.66	0.69	
	1.63	1.83	1.83	2.65	4.54	1.83
4PI	8.00	9.08	21.45			1.63
	3.28	3.22	6.94		2.09	3.93
	2.03					
PRY4QA-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
QAGHMY-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492		6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
QF4DKV-5870	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	
	1.63	1.83	1.83	2.65	4.54	1.83
4PI	8.00	9.08	21.5	7.87		1.63
	3.28			29.5	2.09	3.93
	N/A					
QGHK7D-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
QREMA8-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700	3.6023	7.4627		2.1542	3.6670
	2.2232					
RBM6WW-5870	laboratory specific database					
	5.15	2.40	1.95	1.43	1.44	
	1.66	1.68	1.69	2.56	3.20	1.43
4PI	6.11	5.65	13.29	3.16		1.53
	3.22			48.54	2.04	3.19
	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

RU2KHX-5870	NIST-STRBASE					
	5.2576	3.3647	2.4606	1.7027	1.4950	
	1.6955	1.8636	1.8083	3.3003	5.1813	1.6683
4PI	6.7476	8.7873	23.041	3.8521		1.7340
	3.3967	3.2134	7.6220		2.5523	4.0917
RZRWB9-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					
T2XVRZ-5870	NIST-STRBASE					
	4.37	2.59	1.48	1.66	1.37	
	1.63	1.83	1.83		4.54	1.83
4PI	8.00	9.07	21.5	7.86		1.63
	3.28	3.22	6.94		2.09	3.93
	2.03					
TK9T64-5875	NIST-STRBASE					
	3.87	2.57	1.50	1.62	1.35	
	1.64	1.77	1.84	omitted	4.32	1.71
4PI	7.17	7.97	15.5	7.05		1.60
	3.20			19.2	2.09	3.79
	2.04					
TRTNAE-5870	US SE Hispanic population (FSI:Gen, 25 (2016), 175-181)					
	5.3673	3.2469		1.7417	1.4611	No data
	1.8785	1.547		3.8115	4.5344	1.4293
4PI	6.575	9.7407	13.8419			1.6913
	2.9886	3.2875	6.4146		2.0076	3.6275
	1.9197					
U386FQ-5875	NIST-STRBASE					
	4.3706	2.5934	1.4841	1.6620	1.3721	15.7233
	1.6276	1.8295	1.8295	2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.4592	7.8616		1.6332
	3.2787	3.2196	6.9444	29.5858	2.0886	3.9339
	2.0342					
U4ZYBA-5870	FBI PopStats					
	5.22	1.91	1.14	1.44	1.40	
	1.63	1.54	2.04	2.06	6.96	2.78
4PI	8.71	5.50	14.9	5.50		1.54
	3.87			41.6	2.15	3.66
	2.22					

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

UBXQJ4-5875	NIST-STRBASE					
	3.87	2.57	1.50	1.62	1.35	
	1.64	1.77	1.84	omitted	4.32	1.71
4PI	7.17	7.97	15.5	7.05		1.60
	3.20			19.2	2.09	3.79
	2.04					
ULXG3P-5870	NIST-STRBASE					
	4.3706	2.5933	1.4841	1.6619	1.3721	
	1.6276	1.8294	1.8294	2.6511	4.5372	1.8294
4PI	8.0000	9.0744	21.4592	7.8616		1.6331
	3.2786	3.1887	6.9444		2.0885	3.9339
	2.0341					
URQLVU-5870	FBI/NIST 2017 Hispanic Expanded					
	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295	2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787			29.586	2.0886	3.9339
	2.0342					
VC98WT-5870	FBI PopStats, NIST 2017 population					
	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295	2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787	3.2196	6.9444	29.586	2.0886	3.9339
	2.0342					
VY3YDP-5875	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700				2.1542	3.6670
	2.2232					
W7F8ER-5870	NIST-STRBASE					
	4.3706	2.5933	1.4841	1.6619	1.3721	
	1.6276	1.8294	1.8294	2.6511	4.5372	1.8294
4PI	8.0000	9.0744	21.4592	7.8616		1.6331
	3.2786	3.1887	6.9444		2.0885	3.9339
	2.0341					
W8TZ9T-5870	FBI PopStats					
	5.2247	1.9172	1.1484	1.4463	1.4075	
	1.6329	1.5480	2.0492	2.0695	6.9638	2.7871
4PI	8.7108	5.5006	14.925	5.5006		1.5482
	3.8700			41.667	2.1542	3.6670
	2.2232					

TABLE 2

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

Item 4PI - Paternity Index Results

WPDQ9T-5870	NIST-STRBASE					
	4.3706	2.5934		1.6620	1.3721	15.7233
	1.6276	1.8295		2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.4592			1.6332
	3.2787	3.1888	6.9444		2.0886	3.9339
	2.0342					
XDUDN4-5870	NIST-STRBASE					
	4.3706	2.5933	1.4841	1.6619	1.3721	
	1.6276	1.8294	1.8294	2.6511	4.5372	1.8294
4PI	8.0000	9.0744	21.4592	7.8616		1.6331
	3.2786			29.5857	2.0885	3.9339
	2.0341					
XE9ZZQ-5875	FBI PopStats, Promega/NIST					
	4.61	1.9	1.43	1.44	1.39	--
	1.62	1.53	1.84	2.53	7.27	2.71
4PI	8.48	5.94	14.5	6.87		1.54
	3.77	2.81	5.54	--	2.14	3.64
	2.24					
ZCRPX4-5870	FBI PopStats, Laboratory Specific Database					
		1.90		1.53	1.55	
	1.84	1.54			4.92	1.40
4PI	8.03	5.94	19.1			1.63
	3.91	2.81	5.99		2.06	3.28
	2.18					
ZN6PUW-5870	NIST-STRBASE					
	5.2576	3.3647	2.4606	1.7027	1.4950	
	1.6955	1.8636	1.8083	-	5.1813	1.6683
4PI	6.7476	8.7873	23.0415	3.8521		1.7340
	3.3967			27.9330	2.5523	4.0917
	1.9077					
ZTJM2J-5875	NIST-STRBASE					
	6.1E+00	4.1E+00	2.4E+00	1.9E+00	1.3E+00	
	1.9E+00	1.5E+00	1.6E+00	3.9E+00	4.1E+00	1.7E+00
4PI	6.0E+00	1.1E+01	1.3E+01	3.5E+00		1.7E+00
	2.8E+00			1.6E+01	2.2E+00	3.9E+00
	1.7E+00					
ZUV3VK-5870	FBI PopStats					
	4.3706	2.5934	1.4841	1.6620	1.3721	
	1.6276	1.8295	1.8295	2.6511	4.5372	1.8295
4PI	8.0000	9.0744	21.459	7.8616		1.6332
	3.2787			29.586	2.0886	3.9339
	2.0342					

YSTR Amplification Kit(s) & Results

TABLE 3

WebCode-Test	Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
Item 3 - YSTR Results									
6FZCYX-5875		PowerPlex® Y 23							
			15	12	29	22	10	10	14
3	16	10	12	21		14	18		23
		10	12	16	17		21	11	11
6XFKZX-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11
A7C7UT-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11
A9468Q-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11
ALR62E-5870		PowerPlex® Y 23							
		16	15,15	12	29	22	10	10	14
3	16	10	12	21		14	18		23
		10	12	16	17		21	11	11
BFYMZ9-5870		PowerPlex® Y 23							
		16	15,15	12	29	22	10	10	14
3	16	10	12	21		14	18		23
		10	12	16	17		21	11	11
DHC7X8-5875		PowerPlex® Y 23							
		16	15,15	12	29	22	10	10	14
3	16	10	12	21		14	18		23
		10	12	16	17		21	11	11
EKVHAH-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11
FFJU9L-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11

TABLE 3

Item 3 - YSTR Results

WebCode-Test	Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
GMDLUK-5875		Yfiler® Plus							
	37,38	16	15	12	29	22	10	10	14
3	16	10	12	21	27	14	18	10	23
	38	10		16	17	21	21		11
GT4W4J-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11
HHY4D4-5870		Yfiler® PLUS							
	37,38	16	15,15	12	29	22	10	10	14
3	16	10	12	21	27	14	18	10	23
	38	10		16	17	21	21		11
JPRVX3-5870		Yfiler® Plus							
	37,38	16	15,15	12	29	22	10	10	14
3	16	10	12	21	27	14	18	10	23
	38	10		16	17	21	21		11
KHUL84-5870		Yfiler® Plus							
	37,38	16	15,15	12	29	22	10	10	14
3	16	10	12	21	27	14	18	10	23
	38	10		16	17	21	21		11
L3CXUZ-5870		PowerPlex® Y 23							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		23
		10	12	16	17		21	11	11
LRFQXG-5870		Yfiler® Plus							
	37,38	16	15,15	12	29	22	10	10	14
3	16	10	12	21	27	14	18	10	23
	38	10		16	17	21	21		11
M6VCVF-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11
NG72BV-5870		PowerPlex® Y							
		16	15,15	12	29	22	10	10	14
3	16	10	12	21		14	18		23
		10	12	16	17		21	11	11
QAGHMY-5870		Yfiler® Plus							
	37,38	16	15	12	29	22	10	10	14
3	16	10	12	21	27	14	18	10	23
	38	10		16	17	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									
QF4DKV-5870		Yfiler® Plus, ForenSeq							
	37,38	16	15,15	12	29	22	10	10	14
3	16	10	12	21	27	14	18	10	23
	38	10	12	16	17	21	21	11	11
QREMA8-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11
T2XVRZ-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11
U386FQ-5875		Yfiler®							
	37,38	16	15	12	29	22	10	10	14
3	16	10	12	21	27	14	18	10	23
	38	10		16	17	21	21		11
URQLVU-5870		Yfiler® Plus							
	37,38	16	15,15	12	29	22	10	10	14
3	16	10	12	21	27	14	18	10	23
	38	10		16	17	21	21		11
XDUDN4-5870		Yfiler®							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		
							21		11
ZTJM2J-5875		PowerPlex® Y 23							
		16	15,15	12	29	22	10	10	14
3	16	10	12	21		14	18		23
		10	12	16	17		21	11	11
ZUV3VK-5870		PowerPlex® Y 23							
		16	15	12	29	22	10	10	14
3	16	10	12	21		14	18		23
		10	12	16	17		21	11	11

TABLE 3

Item 4 - YSTR Results

Item	WebCode-Test / Amplification Kit	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
		DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
6FZCYX-5875	PowerPlex® Y 23			11,15	14	30	24	10	13	13
4		14	12	12	19		16	17		22
			12	12	17	17		23	10	11
6XFKZX-5870	Yfiler®									
			14	11,15	14	30	24	10	13	13
4		14	12	12	19		16	17		
								23		11
A7C7UT-5870	Yfiler®									
			14	11,15	14	30	24	10	13	13
4		14	12	12	19		16	17		
								23		11
A9468Q-5870	Yfiler®									
			14	11,15	14	30	24	10	13	13
4		14	12	12	19		16	17		
								23		11
ALR62E-5870	PowerPlex® Y 23									
			14	11,15	14	30	24	10	13	13
4		14	12	12	19		16	17		22
			12	12	17	17		23	10	11
BFYMZ9-5870	PowerPlex® Y 23									
			14	11,15	14	30	24	10	13	13
4		14	12	12	19		16	17		22
			12	12	17	17		23	10	11
DHC7X8-5875	PowerPlex® Y 23									
			14	11,15	14	30	24	10	13	13
4		14	12	12	19		16	17		22
			12	12	17	17		23	10	11
EKVHAH-5870	Yfiler®									
			14	11,15	14	30	24	10	13	13
4		14	12	12	19		16	17		
								23		11
FFJU9L-5870	Yfiler®									
			14	11,15	14	30	24	10	13	13
4		14	12	12	19		16	17		
								23		11
GMDLUK-5875	Yfiler® Plus									
		36	14	11,15	14	30	24	10	13	13
4		14	12	12	19	30	16	17	10	22
		39	12		17	17	22	23		11

TABLE 3

Item 4 - YSTR Results

WebCode-Test	Amplification Kit								
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
GT4W4J-5870		Yfiler®							
		14	11,15	14	30	24	10	13	13
4	14	12	12	19		16	17		
							23		11
HHY4D4-5870		Yfiler® PLUS							
	36,36	14	11,15	14	30	24	10	13	13
4	14	12	12	19	30	16	17	10	22
	39	12		17	17	22	23		11
JPRVX3-5870		Yfiler® Plus							
	36,36	14	11,15	14	30	24	10	13	13
4	14	12	12	19	30	16	17	10	22
	39	12		17	17	22	23		11
KHUL84-5870		Yfiler® Plus							
	36,36	14	11,15	14	30	24	10	13	13
4		12		19	30	16	17	10	22
	39			17	17	22	23		
L3CXUZ-5870		PowerPlex® Y 23							
		14	11,15	14	30	24	10	13	13
4	14	12	12	19		16	17		22
		12	12	17	17		23	10	11
LRFQXG-5870		Yfiler® Plus							
	36,36	14	11,15	14	30	24	10	13	13
4	14	12	12	19	30	16	17	10	22
	39	12		17	17	22	23		11
M6VCVF-5870		Yfiler®							
		14	11,15	14	30	24	10	13	13
4	14	12	12	19		16	17		
							23		11
NG72BV-5870		PowerPlex® Y 23							
		14	11,15	14	30	24	10	13	13
4	14	12	12	19		16	17		22
		12	12	17	17		23	10	11
QAGHMY-5870		Yfiler® Plus							
	36	14	11,15	14	30	24	10	13	13
4	14	12	12	19	30	16	17	10	22
	39	12		17	17	22	23		11
QF4DKV-5870		Yfiler® Plus, ForenSeq							
	36,36	14	11,15	14	30	24	10	13	13
4	14	12	12	19	30	16	17	10	22
	39	12	12	17	17	22	23	10	11

TABLE 3

Item 4 - YSTR Results

Item	WebCode-Test / Amplification Kit								
	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
QREMA8-5870		Yfiler®							
		14	11,15	14	30	24	10	13	13
4	14	12	12	19		16	17		
							23		11
T2XVRZ-5870		Yfiler®							
		14	11,15	14	30	24	10	13	13
4	14	12	12	19		16	17		
							23		11
U386FQ-5875		Yfiler®							
	36	14	11,15	14	30	24	10	13	13
4	14	12	12	19	30	16	17	10	22
	39	12		17	17	22	23		11
URQLVU-5870		Yfiler® Plus							
	36,36	14	11,15	14	30	24	10	13	13
4	14	12	12	19	30	16	17	10	22
	39	12		17	17	22	23		11
XDUDN4-5870		Yfiler®							
		14	11,15	14	30	24	10	13	13
4	14	12	12	19		16	17		
							23		11
ZTJM2J-5875		PowerPlex® Y 23							
		14	11,15	14	30	24	10	13	13
4	14	12	12	19		16	17		22
		12	12	17	17		23	10	11
ZUV3VK-5870		PowerPlex® Y 23							
		14	11,15	14	30	24	10	13	13
4	14	12	12	19		16	17		22
		12	12	17	17		23	10	11

Additional DNA & PI Results

TABLE 4

Locus	WebCode-Test	Item 1	Item 2	Item 3	Item 3 PI	Item 4	Item 4 PI
QS1	H6ENA6-5875	Q,Q	Q,Q	Q,Q		Q,Q	
QS2	H6ENA6-5875	S,S	S,S	S,S		S,S	

Paternity DNA Statistics & Conclusions

TABLE 5

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
2K6TQN-5870	Item 4 - Alleged Father B	3.33 Trillion	99.99%	Popstats NIST 2017
2N3EDK-5875	Item 4 - Alleged Father B	2,017,000,000	99.99999995042%	FBI PopStats
6BJ4CX-5870	Item 4 - Alleged Father B	84,020,000,000	99.99	FBI PopStats
6FZCYX-5875	Item 4 - Alleged Father B	119,964,738,755.4350	99.9999%	FBI PopStats
6JDCWN-5870	Item 4 - Alleged Father B	42,510,000,000	99.999999997648	FBI PopStats
6UYDCY-5870	Item 4 - Alleged Father B	84,020,000,000	99.999999998810	FBI PopStats
6V8NBM-5870	Item 4 - Alleged Father B	42 billion Hispanic population	99.9999%	NIST-STRBASE
6W2BMR-5870	Item 4 - Alleged Father B	1.320e+10	99.999%	NIST-STRBASE
6XFKZX-5870	Item 4 - Alleged Father B	1.48E+11	99.9999%	NIST-STRBASE
7B3ABN-5870	Item 4 - Alleged Father B	42,510,000,000	99.999999997648%	FBI PopStats
8UDG7G-5870	Item 4 - Alleged Father B			FBI PopStats
9279QF-5870	Item 4 - Alleged Father B	3.33 trillion	99.99%	Popstats NIST 2017
9DFT9M-5875	Item 4 - Alleged Father B	1.0160E12	>99.9999999999	FBI PopStats
A2KYBK-5870	Item 4 - Alleged Father B	42,510,000,000	99.999999997648	FBI PopStats
A7C7UT-5870	Item 4 - Alleged Father B	1.4883E+11	99.9999%	NIST-STRBASE
A9468Q-5870	Item 4 - Alleged Father B	1.4912E+11	99.9999%	NIST-STRBASE
ADDJRB-5875	Item 4 - Alleged Father B	2,017,000,000	99.99999995042	FBI PopStats
AJZ9CK-5870	Item 4 - Alleged Father B	45,510,000,000	99.999999997648	FBI PopStats
ALR62E-5870	Item 4 - Alleged Father B	3328881244000	99.99999999	NIST-STRBASE
ATM83Q-5870	Item 4 - Alleged Father B	84020000000	99.999999998810	FBI PopStats

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
B6EBQG-5870	Item 4 - Alleged Father B	42,000,000,000	99.9999%	NIST-STRBASE
BFYMZ9-5870	Item 4 - Alleged Father B	3334212451020.24	99.99999999997%	NIST-STRBASE
BKC6GP-5870	Item 4 - Alleged Father B	84,020,000,000	99.999999998810	FBI PopStats
BLNZ2W-5870	Item 4 - Alleged Father B	8.222E+010		NIST-STRBASE
BP8YEQ-5870	Item 4 - Alleged Father B	84,020,000,000	99.9999	FBI PopStats
CCDXFV-5870	Item 4 - Alleged Father B	8.222E+010		NIST-STRBASE
D6QRU9-5870	Item 4 - Alleged Father B	3.519X10E11	99.999999999158%	[Location Identifying Population]
DD3QNJ-5875	Item 4 - Alleged Father B	13,000,000,000		NIST-STRBASE
DHC7X8-5875	Item 4 - Alleged Father B	112,000,000,000 (a billion)	99.9	NIST-STRBASE
DM9RMP-5870	Item 4 - Alleged Father B	84,020,000,000	99.999999998810	FBI PopStats
E3FBXL-5870	Item 4 - Alleged Father B	84,020,000,000	99.999999998810	FBI PopStats
EE9Q4B-5870	Item 4 - Alleged Father B	251, 353, 270, 112	99.9999999996	[Location Identifying Database]
EJNYRA-5870	Item 4 - Alleged Father B	2.2590E+12	>99.9999999999	FBI PopStats
EKVHAH-5870	Item 4 - Alleged Father B	1.4912 E+11	99.9999%	NIST-STRBASE
EZBJ79-5870	Item 4 - Alleged Father B	111 billion	99.9%	NIST-STRBASE
FFJU9L-5870	Item 4 - Alleged Father B	1.4913E+11	99.9999	NIST-STRBASE
GBJ66J-5870	Item 4 - Alleged Father B	84,020,000,000	99.999999998810	FBI PopStats
GGB9FB-5870	Item 4 - Alleged Father B	4,100,000,000	99.99	FBI PopStats
GMDLUK-5875	Item 4 - Alleged Father B	8.30E+10	99.9999999988%	NIST-STRBASE
GT4W4J-5870	Item 4 - Alleged Father B	1.4912E+11	99.9999%	NIST-STRBASE
GWJ4RJ-5870	Item 4 - Alleged Father B	84,020,000,000	99.999999998810	FBI PopStats

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
H6ENA6-5875	Item 4 - Alleged Father B	2058074777	99.999999951%	laboratory specific database
H8FMDJ-5870	Item 4 - Alleged Father B	15 000 000	99.99	local/state database
HHY4D4-5870	Item 4 - Alleged Father B	351900000000	99.99999999	[Location Identifying Database]
HLYE94-5875	Item 4 - Alleged Father B	1.77E+12	99.9999999999%	NIST-STRBASE
HPKWQN-5870	Item 4 - Alleged Father B	1.32e09	1.0000	national database
JPRVX3-5870	Item 4 - Alleged Father B	7.32e10		NIST-STRBASE
JQAPYD-5870	Item 4 - Alleged Father B	42 billion	99.9999%	NIST-STRBASE
KHUL84-5870	Item 4 - Alleged Father B	83 billion		NIST-STRBASE, Hispanic population allele frequencies
L3CXUZ-5870	Item 4 - Alleged Father B	3334212451020	99.99%	NIST-STRBASE
L6FPLD-5870	Item 4 - Alleged Father B	84 billion	99.999999998810	FBI PopStats
LRFQXG-5870	Item 4 - Alleged Father B	14,103,046	99.999993	Hispanic
LYCLXZ-5875	Item 4 - Alleged Father B	1.6 trillion	Not reported by lab	NIST-STRBASE
M6VCVF-5870	Item 4 - Alleged Father B	1.4913E+11	99.9999%	NIST-STRBASE
MCXGQ6-5870	Item 4 - Alleged Father B	42 billion	99.9999%	NIST-STRBASE
MQHZ68-5870	Item 4 - Alleged Father B	42,510,000,000	99.999999997648	FBI PopStats
N9TAJD-5870	Item 4 - Alleged Father B	84,020,000,000	99.999999998810	FBI PopStats
NDQTMW-5875	Item 4 - Alleged Father B	2.2 trillion	99.99%	laboratory specific database
NG72BV-5870	Item 4 - Alleged Father B			[Location Identifying Database]
P2NRMX-5870	Item 4 - Alleged Father B	4311187023.36681	99.9999999768045	NIST-STRBASE
P4FQ2V-5875	Item 4 - Alleged Father B			

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
PRY4QA-5870	Item 4 - Alleged Father B	84,020,000,000	99.99	FBI PopStats
QAGHMY-5870	Item 4 - Alleged Father B	40,600,000,000	99.999999997537	FBI PopStats
QF4DKV-5870	Item 4 - Alleged Father B	7.32e10		NIST-STRBASE
QGHK7D-5870	Item 4 - Alleged Father B	84,020,000,000	99.999999998810	FBI PopStats
QREMA8-5870	Item 4 - Alleged Father B	54,210,000,000	99.999999998155%	FBI PopStats
RBM6WW-5870	Item 4 - Alleged Father B	10900000000	99.999999%	laboratory specific database
RU2KHX-5870	Item 4 - Alleged Father B	143,200,000,000		NIST-STRBASE
RZRWB9-5870	Item 4 - Alleged Father B	84,020,000,000	99.99	FBI PopStats
T2XVRZ-5870	Item 4 - Alleged Father B	42 billion	99.9999%	NIST-STRBASE
TK9T64-5875	Item 4 - Alleged Father B	13,000,000,000		NIST-STRBASE
TRTNAE-5870	Item 4 - Alleged Father B	Approx 4.2 billion	99.9999%	US SE Hispanic population (FSI:Gen, 25 (2016), 175-181)
U386FQ-5875	Item 4 - Alleged Father B	5.2425 E+13	99.9999%	NIST-STRBASE
U4ZYBA-5870	Item 4 - Alleged Father B	84,020,000,000	99.999	FBI PopStats
UBXQJ4-5875	Item 4 - Alleged Father B	13 billion		NIST-STRBASE
ULXG3P-5870	Item 4 - Alleged Father B	1.11E+11	99.9%	NIST-STRBASE
URQLVU-5870	Item 4 - Alleged Father B	149,100,000,000	99.999999999329	FBI/NIST 2017 Hispanic Expanded
VC98WT-5870	Item 4 - Alleged Father B	3.33 trillion	99.99	FBI PopStats, NIST 2017 population
VY3YDP-5875	Item 4 - Alleged Father B	2,017,000,000	99.99999995042	FBI PopStats
W7F8ER-5870	Item 4 - Alleged Father B	111 billion	99.9%	NIST-STRBASE
W8TZ9T-5870	Item 4 - Alleged Father B	40,600,000,000	99.999999997537	FBI PopStats

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
WPDQ9T-5870	Item 4 - Alleged Father B	8.222e10		NIST-STRBASE
XDUDN4-5870	Item 4 - Alleged Father B	1.4912E+11	99.9999%	NIST-STRBASE
XE9ZZQ-5875	Item 4 - Alleged Father B	45200000000	99.99999999	FBI PopStats, Promega/NIST
ZCRPX4-5870	Item 4 - Alleged Father B	120,000,000	99.99%	FBI PopStats, Laboratory Specific Database
ZN6PUW-5870	Item 4 - Alleged Father B	9.4 x 10^10	99.9999	NIST-STRBASE
ZTJM2J-5875	Item 4 - Alleged Father B	6.1E+10	>99.99999999	NIST-STRBASE
ZUV3VK-5870	Item 4 - Alleged Father B	1.491x10^11	99.9999999993 %	FBI PopStats

Paternity DNA Statistics Response Summary — **Participants: 88**

Which of the alleged fathers cannot be excluded as the biological parent of Item 2?

Responses

Item 3 - Alleged Father A	0
Item 4 - Alleged Father B	88
Inconclusive	0
No Response	0

Kinship Likelihood Ratio Results

TABLE 6

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D1S1656	6FZCYX-5875	1/2		.5
	6W2BMR-5870	1/2		0.5000
	6XFKZX-5870	1/2		0.5000
	A7C7UT-5870	1/2		0.5000
	A9468Q-5870	1/2		0.5000
	ALR62E-5870	1/2		0.5000
	D6QRU9-5870	1/2		0.5
	DD3QNJ-5875			0.5000
	DHC7X8-5875			0.500
	EKVHAH-5870	1/2		0.5000
	FFJU9L-5870	1/2		0.5000
	GMDLUK-5875	1/2		0.5000
	GT4W4J-5870	1/2		0.5000
	HLYE94-5875	1/2		0.5
	KHUL84-5870	Zo		0.5
	L3CXUZ-5870			0.5000
	M6VCVF-5870	1/2		0.5000
	TK9T64-5875			0.5000
	TRTNAE-5870	1/2		0.5
	U386FQ-5875	0.5		0.5
	UBXQJ4-5875	*	*	0.5000
	URQLVU-5870	(c^2)/2c^2	C=16	0.5
	XDUDN4-5870	1/2		0.5000
	XE9ZZQ-5875	1/2	--	0.5000
	ZN6PUW-5870	2/4	-	0.5000
	ZTJM2J-5875	2/4		0.50
	ZUV3VK-5870	1/2		0.5

Statistical Analysis Summary of D1S1656 **Likelihood Ratio Mode: 0.5000**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S1338	6FZCYX-5875	(1+2p)/4p	p=17	1.8470
	6W2BMR-5870	(1+2*p)/(4*p)	p = 17 q = 20	1.847
	6XFKZX-5870	(1+2p)/4p	p = 17	1.847
	A7C7UT-5870	(1+2p)/4p	p = 17	1.8470
	A9468Q-5870	(1+2p)/4p	p=17	1.8469
	ALR62E-5870	(1+2p)/4p	p=17	1.8470
	D6QRU9-5870	(1+2p)/4p	17	1.8469
	DD3QNJ-5875			1.752
	DHC7X8-5875			1.847
	EKVHAH-5870	(1+2p)/4p	p=17	1.8469
	FFJU9L-5870	1+2p/4p	p=17	1.8469
	GMDLUK-5875	(2p+1)/4p	p=17	1.847
	GT4W4J-5870	(1+2p)/4p	p=17	1.8469
	HLYE94-5875	(1+2a)/4a	a = 17	1.847
	KHUL84-5870	(Z1/2p)+Z0	p=0.1856	1.847
	L3CXUZ-5870	(1+2a)/4a	a=17	1.847
	M6VCVF-5870	(1+2p)/4p	p=17	1.8470
	TK9T64-5875			1.752
	TRTNAE-5870	(1+2p)/4p	p=17	1.8470
	U386FQ-5875	(1+2p)/4p	p=17	1.8470
	UBXQJ4-5875	*	*	1.752
	URQLVU-5870	(a+2a^2)/4a^2	a=17	1.846982759
	XDUDN4-5870	(1+2p)/4p	p=17	1.8469
	XE9ZZQ-5875	(1+2p)/4p	p=17	1.8470
	ZN6PUW-5870	(1+2p)/4p	p = 17	1.8470
	ZTJM2J-5875	(1+2p)/4p	p=17	1.85
	ZUV3VK-5870	(1+2p)/4p	p=17	1.8469

Statistical Analysis Summary of D2S1338 **Likelihood Ratio Mode: 1.8470**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S441	6FZCYX-5875	(1+p)/2p	p=11	1.9556
	6W2BMR-5870	(2+2*p)/(4*p)	p = 11	1.956
	6XFKZX-5870	(1+p)/2p	p = 11	1.956
	A7C7UT-5870	(1+p)/2p	p = 11	1.9556
	A9468Q-5870	(1+p)/2p	p=11	1.9556
	ALR62E-5870	(1+p)/2p	p=11	1.9556
	D6QRU9-5870	(1+p)/2p	11	1.9556
	DD3QNJ-5875			1.879
	DHC7X8-5875			1.955
	EKVHAH-5870	(1+p)/2p	p=11	1.9556
	FFJU9L-5870	1+p/2p	p=11	1.9556
	GMDLUK-5875	(p+1)/2p	p=11	1.956
	GT4W4J-5870	(1+p)/2p	p=11	1.9556
	HLYE94-5875	(1+a)/2a	a = 11	1.956
	KHUL84-5870	(Z2/p^2)+(Z1/p)+Z0	p=0.3435	1.956
	L3CXUZ-5870	(1+a)/2a	a=11	1.956
	M6VCVF-5870	(1+p)/2p	p=11	1.9556
	TK9T64-5875			1.879
	TRTNAE-5870	(1+p)/2p	p=11	1.9556
	U386FQ-5875	(1+p)/2p	p=11	1.9556
	UBXQJ4-5875	*	*	1.879
	URQLVU-5870	(a+2a^2)/2a^2	a=11	1.955604076
	XDUDN4-5870	(1+p)/2p	p=11	1.9556
	XE9ZZQ-5875	(1+p)/2p	p=11	1.9556
	ZN6PUW-5870	2p(1+p)/(4p^2)	p = 11	1.9556
	ZTJM2J-5875	(2p(1+p))/(2p)^2	p=11	1.96
	ZUV3VK-5870	(1+p)/2p	p=11	1.9556

Statistical Analysis Summary of D2S441 **Likelihood Ratio Mode: 1.9556**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D3S1358	6FZCYX-5875	(1+4p)/8p	p=15	.9580
	6W2BMR-5870	(1+4*p)/(8*p)	p =15 q = 16 r = 18	0.9580
	6XFKZX-5870	(1+4p)/8p	p = 15	0.9580
	A7C7UT-5870	(1+4p)/8p	p = 15	0.9580
	A9468Q-5870	(1+4p)/8p	p=15	0.9580
	ALR62E-5870	(1+4p)/8p	p=15	0.9580
	D6QRU9-5870	(1+4p)/8p	15	0.9580
	DD3QNJ-5875			0.9555
	DHC7X8-5875			0.958
	EKVHAH-5870	(1+4p)/8p	p=15	0.9580
	FFJU9L-5870	1+4p/8p	p=15	0.9580
	GMDLUK-5875	(1+4p)/8p	p=15	0.9580
	GT4W4J-5870	(1+4p)/8p	p=15	0.9580
	HLYE94-5875	(1+4a)/8a	a = 15	0.9580
	KHUL84-5870	(Z1/4p)+Z0	p=0.2729	0.9580
	L3CXUZ-5870	(1+4a)/8a	a=15	0.9580
	M6VCVF-5870	(1+4p)/8p	p=15	0.9580
	TK9T64-5875			.9555
	TRTNAE-5870	(1+4p)/8p	p=15	0.9580
	U386FQ-5875	(1+4p)/8p	p=15	0.9580
	UBXQJ4-5875	*	*	0.9555
	URQLVU-5870	c+4ac/8ac	a=15, c=16	0.958043239
	XDUDN4-5870	(1+4p)/8p	p=15	0.9580
	XE9ZZQ-5875	(1+4p)/8p	p=15	0.9580
	ZN6PUW-5870	(1+4p)/8p	p = 15	0.9580
	ZTJM2J-5875	(1+4p)/8p	p=15	0.96
	ZUV3VK-5870	(1+4p)8p	p=15	0.9580
Statistical Analysis Summary of D3S1358			**Likelihood Ratio Mode:**	**0.9580**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D5S818	6FZCYX-5875	(1+4p)/8p	p=11	.8511
	6W2BMR-5870	(1+4*p)/(8*p)	r = 9 q = 13 p = 11	0.8510
	6XFKZX-5870	(1+4p)/8p	p = 11	0.8511
	A7C7UT-5870	(1+4p)/8p	p = 11	0.8511
	A9468Q-5870	(1+4r)/8r	r=11	0.8511
	ALR62E-5870	(1+4p)/8p	p=11	0.8511
	D6QRU9-5870	(1+4r)/8r	11	0.8511
	DD3QNJ-5875			0.8522
	DHC7X8-5875			0.851
	EKVHAH-5870	(1+4p)/8p	p=11	0.8511
	FFJU9L-5870	1+4r/8r	r=11	0.8511
	GMDLUK-5875	(1+4p)/8p	p=11	0.8511
	GT4W4J-5870	(1+4r)/8r	r=11	0.8511
	HLYE94-5875	(1+4a)/8a	a = 11	0.8511
	KHUL84-5870	(Z1/4p)+Z0	p=0.3560	0.8511
	L3CXUZ-5870	(1+4a)/8a	a=11	0.8511
	M6VCVF-5870	(1+4r)/8r	r=11	0.8511
	TK9T64-5875			.8522
	TRTNAE-5870	(1+4p)/8p	p=11	0.8511
	U386FQ-5875	(1+4p)/8p	p=11	0.8511
	UBXQJ4-5875	*	*	0.8522
	URQLVU-5870	c+4ac/8ac	a=11, c=9	0.851123596
	XDUDN4-5870	(1+4r)/8r	r=11	0.8511
	XE9ZZQ-5875	(1+4r)/8r	r=11	0.8511
	ZN6PUW-5870	(1+4p)/8p	p = 11	0.8511
	ZTJM2J-5875	(1+4p)/8p	p=11	0.85
	ZUV3VK-5870	(1+4p)/8p	p=11	0.8511
Statistical Analysis Summary of D5S818			**Likelihood Ratio Mode:**	**0.8511**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D7S820	6FZCYX-5875	(1+4p)/8p	p=9	1.2458
	6W2BMR-5870	(1+4*r)/(8*r)	r = 9 q = 8.1 p = 11	1.246
	6XFKZX-5870	(1+4p)/8p	p = 9	1.246
	A7C7UT-5870	(1+4p)/8p	p = 9	1.2458
	A9468Q-5870	(1+4a)/8a	a=9	1.2458
	ALR62E-5870	(1+4p)/8p	p=9	1.2458
	D6QRU9-5870	(1+4a)/8a	9	1.2458
	DD3QNJ-5875			1.225
	DHC7X8-5875			1.245
	EKVHAH-5870	(1+4p)/8p	p=9	1.2458
	FFJU9L-5870	1+4a/8a	a=9	1.2458
	GMDLUK-5875	(1+4p)/8p	p=9	1.246
	GT4W4J-5870	(1+4a)/8a	a=9	1.2458
	HLYE94-5875	(1+4a)/8a	a = 9	1.246
	KHUL84-5870	(Z1/4p)+Z0	p=0.1676	1.246
	L3CXUZ-5870	(1+4a)/8a	a=9	1.246
	M6VCVF-5870	(1+4a)/8a	a=9	1.2458
	TK9T64-5875			1.225
	TRTNAE-5870	(1+4p)/8p	p=9	1.2458
	U386FQ-5875	(1+4p)/8p	p=9	1.2458
	UBXQJ4-5875	*	*	1.225
	URQLVU-5870	c+4ac/8ac	a=9, c=8.1	1.245823389
	XDUDN4-5870	(1+4a)/8a	a=9	1.2458
	XE9ZZQ-5875	(1+4a)/8a	a=9	1.2458
	ZN6PUW-5870	(1+4p)/8p	p = 9	1.2458
	ZTJM2J-5875	(1+4p)/8p	p=9	1.25
	ZUV3VK-5870	(1+4p)/8p	p=9	1.2458

Statistical Analysis Summary of D7S820 **Likelihood Ratio Mode: 1.2458**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D8S1179	6FZCYX-5875	1/2		.5
	6W2BMR-5870	1/2		0.5000
	6XFKZX-5870	1/2		0.5000
	A7C7UT-5870	1/2		0.5000
	A9468Q-5870	1/2		0.5000
	ALR62E-5870	1/2		0.5000
	D6QRU9-5870	1/2		0.5
	DD3QNJ-5875			0.5000
	DHC7X8-5875			0.500
	EKVHAH-5870	1/2		0.5000
	FFJU9L-5870	1/2		0.5000
	GMDLUK-5875	1/2		0.5000
	GT4W4J-5870	1/2		0.5000
	HLYE94-5875	1/2		0.5000
	KHUL84-5870	Z0		0.5
	L3CXUZ-5870			0.5000
	M6VCVF-5870	1/2		0.5000
	TK9T64-5875			0.5000
	TRTNAE-5870	1/2		0.5
	U386FQ-5875	0.5		0.5
	UBXQJ4-5875	*	*	0.5000
	URQLVU-5870	cd/2cd	c=11, d=13	0.5
	XDUDN4-5870	1/2		0.5000
	XE9ZZQ-5875	1/2	--	0.5000
	ZN6PUW-5870	2/4	-	0.5000
	ZTJM2J-5875	2/4		0.50
	ZUV3VK-5870	1/2		0.5

Statistical Analysis Summary of D8S1179 **Likelihood Ratio Mode: 0.5000**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D10S1248	6FZCYX-5875	(1+2p)/4p	p=15	1.7710
	6W2BMR-5870	(1+2*q)/(4*q)	p = 14 q = 15	1.771
	6XFKZX-5870	(1+2p)/4p	p = 15	1.771
	A7C7UT-5870	(1+2p)/4p	p = 15	1.7710
	A9468Q-5870	(1+2q)/4q	q=15	1.7709
	ALR62E-5870	(1+2p)/4p	p=15	1.7710
	D6QRU9-5870	(1+2q)/4q	15	1.7709
	DD3QNJ-5875			1.688
	DHC7X8-5875			1.771
	EKVHAH-5870	(1+2p)/4p	p=15	1.7709
	FFJU9L-5870	1+2q/4q	q=15	1.7709
	GMDLUK-5875	(2p+1)/4p	p=15	1.771
	GT4W4J-5870	(1+2q)/4q	q=15	1.7709
	HLYE94-5875	(1+2a)/4a	a = 15	1.771
	KHUL84-5870	(Z1/2p)+Z0	p=0.1967	1.771
	L3CXUZ-5870	(1+2a)/4a	a=15	1.771
	M6VCVF-5870	(1+2q)/4q	q=15	1.7710
	TK9T64-5875			1.688
	TRTNAE-5870	(1+2p)/4p	p=15	1.7710
	U386FQ-5875	(1+2p)/4p	p=15	1.7710
	UBXQJ4-5875	*	*	1.688
	URQLVU-5870	b+2ab/4ab	a=15, b=14	1.770971022
	XDUDN4-5870	(1+2q)/4q	q=15	1.7709
	XE9ZZQ-5875	(1+2q)/4q	q=15	1.7710
	ZN6PUW-5870	(1+2p)/4p	p = 15	1.7710
	ZTJM2J-5875	(1+2p)/4p	p=15	1.77
	ZUV3VK-5870	(1+2p)/4p	p=15	1.7709

Statistical Analysis Summary of D10S1248 **Likelihood Ratio Mode: 1.7710**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D12S391	6FZCYX-5875	(1+4p)/8p	p=16	6.1306
	6W2BMR-5870	(1+4*p)/(8*p)	p = 16 q = 19 r = 21	6.131
	6XFKZX-5870	(1+4p)/8p	p = 16	6.131
	A7C7UT-5870	(1+4p)/8p	p = 16	6.1306
	A9468Q-5870	(1+4p)/8p	p=16	6.1306
	ALR62E-5870	(1+4p)/8p	p=16	6.1306
	D6QRU9-5870	(1+4p)/8p	16	6.1306
	DHC7X8-5875			6.140
	EKVHAH-5870	(1+4p)/8p	p=16	6.1306
	FFJU9L-5870	1+4p/8p	p=16	6.1306
	GMDLUK-5875	(1+4p)/8p	p=16	6.131
	GT4W4J-5870	(1+4p)/8p	p=16	6.1306
	HLYE94-5875	(1+4a)/8a	a = 16	6.131
	KHUL84-5870	(Z1/4p)+Z0	p=0.0222	6.131
	L3CXUZ-5870	(1+4a)/8a	a=16	6.131
	M6VCVF-5870	(1+4p)/8p	p=16	6.1306
	TRTNAE-5870	(1+4p)/8p	p=16	6.1306
	U386FQ-5875	(1+4p)/8p	p=16	6.1306
	URQLVU-5870	c+4ac/8ac	a=16, c=21	6.130630631
	XDUDN4-5870	(1+4p)/8p	p=16	6.1306
	XE9ZZQ-5875	(1+4p)/8p	p=16	6.1306
	ZTJM2J-5875	(1+4p)/8p	p=16	6.13
	ZUV3VK-5870	(1+4p)/8p	p=16	6.1306

Statistical Analysis Summary of D12S391 **Likelihood Ratio Mode: 6.1306**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D13S317	6FZCYX-5875	(p+q+4pq)/8pq	p=8, q=11	1.9214
	6W2BMR-5870	(p+q+4*p*q)/(8*p*q)	q = 8 p = 11	1.921
	6XFKZX-5870	(p+q+4pq)/8pq	p = 8 q = 11	1.921
	A7C7UT-5870	(p+q+4pq)/8pq	p = 8 q = 11	1.9214
	A9468Q-5870	(p+s+4ps)/8ps	p=8, s=11	1.9213
	ALR62E-5870	(p+q+4pq)/8pq	p=8 q=11	1.9214
	D6QRU9-5870	(p+s+4ps)/8ps	8,11	1.9213
	DD3QNJ-5875			1.870
	DHC7X8-5875			1.921
	EKVHAH-5870	(p+q+4pq)/8pq	p=8 q=11	1.9213
	FFJU9L-5870	p+s+4ps/8ps	p=8 s=11	1.9213
	GMDLUK-5875	(p+q+4pq)/8pq	p=8 q=11	1.921
	GT4W4J-5870	(p+s+4ps)/8ps	p=8 s=11	1.9213
	HLYE94-5875	(a+b+4ab)/8ab	a = 8 b = 11	1.921
	KHUL84-5870	((2Z2+Z1(p+q))/(4pq))+Z0	p=0.1205 q=0.3255	1.921
	L3CXUZ-5870	(a+b+4ab)/8ab	a=8 b=11	1.921
	M6VCVF-5870	(p+s+4ps)/8ps	p=8 s=11	1.9214
	TK9T64-5875			1.870
	TRTNAE-5870	(p+q+4pq)/8pq	p=8 q=11	1.9214
	U386FQ-5875	(p+q+4pq)/8pq	p=8 q=11	1.9214
	UBXQJ4-5875	*	*	1.870
	URQLVU-5870	a+b+4ab/8ab	a=8, b=11	1.921368976
	XDUDN4-5870	(p+s+4ps)/8ps	p=8 s=11	1.9213
	XE9ZZQ-5875	(p+s+4ps)/8ps	p=8 s=11	1.9214
	ZN6PUW-5870	(p+q+4pq)/8pq	p = 8 q = 11	1.9214
	ZTJM2J-5875	(p+q+4pq)/8pq	p=8, q =11	1.92
	ZUV3VK-5870	(p+q+4pq)/8pq	p=18 q=11	1.9221
Statistical Analysis Summary of D13S317			**Likelihood Ratio Mode:**	**1.9214**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D16S539	6FZCYX-5875	(1+2p)/4p	p=12	1.2952
	6W2BMR-5870	(1+2*q)/(4*q)	p = 11 q = 12	1.295
	6XFKZX-5870	(1+2p)/4p	p = 12	1.295
	A7C7UT-5870	(1+2p)/4p	p = 12	1.2952
	A9468Q-5870	(1+2q)/4q	q=12	1.2951
	ALR62E-5870	(1+2p)/4p	p=12	1.2952
	D6QRU9-5870	(1+2q)/4q	12	1.2951
	DD3QNJ-5875			1.270
	DHC7X8-5875			1.295
	EKVHAH-5870	(1+2p)/4p	p=12	1.2951
	FFJU9L-5870	1+2q/4q	q=12	1.2951
	GMDLUK-5875	(2p+1)/4p	p=12	1.295
	GT4W4J-5870	(1+2q)/4q	q=12	1.2951
	HLYE94-5875	(1+2a)/4a	a = 12	1.295
	KHUL84-5870	(Z1/2p)+Z0	p=0.3144	1.295
	L3CXUZ-5870	(1+2a)/4a	a=12	1.295
	M6VCVF-5870	(1+2q)/4q	q=12	1.2952
	TK9T64-5875			1.270
	TRTNAE-5870	(1+2p)/4p	p=12	1.2952
	U386FQ-5875	(1+2p)/4p	p=12	1.2952
	UBXQJ4-5875	*	*	1.270
	URQLVU-5870	b+2ab/4ab	a=12, b=11	1.295165394
	XDUDN4-5870	(1+2q)/4q	q=12	1.2951
	XE9ZZQ-5875	(1+2q)/4q	q=12	1.2952
	ZN6PUW-5870	(1+2p)/4p	p = 12	1.2952
	ZTJM2J-5875	(1+2p)/4p	p=12	1.30
	ZUV3VK-5870	(1+2p)/4p	p=12	1.2951

Statistical Analysis Summary of D16S539 **Likelihood Ratio Mode: 1.2952**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D18S51	6FZCYX-5875	(p+q+4pq)/8pq	p=15, q=17	2.1361
	6W2BMR-5870	(p+q+4*P*q)/(8*p*q)	p = 15 q = 17	2.136
	6XFKZX-5870	(p+q+4pq)/8pq	p = 15 q = 17	2.136
	A7C7UT-5870	(p+q+4pq)/8pq	p = 15 q = 17	2.1361
	A9468Q-5870	(p+r+4pr)/8pr	p=15, r=17	2.1360
	ALR62E-5870	(p+q+4pq)/8pq	p=15 q=17	2.1361
	D6QRU9-5870	(p+r+4pr)/8pr	15,17	2.1360
	DD3QNJ-5875			2.081
	DHC7X8-5875			2.136
	EKVHAH-5870	(p+q+4pq)/8pq	p=15 q=17	2.1360
	FFJU9L-5870	p+r+4pr/8pr	p=15 r=17	2.1360
	GMDLUK-5875	(p+q+4pq)/8pq	p=15 q=17	2.136
	GT4W4J-5870	(p+r+4pr)/8pr	p=15 r=17	2.1360
	HLYE94-5875	(a+b+4ab)/8ab	a = 15 b = 17	2.136
	KHUL84-5870	((2Z2+Z1(p+q))/(4pq))+Z0	p=0.1704 q=0.1385	2.136
	L3CXUZ-5870	(a+b+4ab)/8ab	a=15 b=17	2.136
	M6VCVF-5870	(p+r+4pr)/8pr	p=15 r=17	2.1361
	TK9T64-5875			2.081
	TRTNAE-5870	(p+q+4pq)/8pq	p=15 q=17	2.1361
	U386FQ-5875	(p+q+4pq)/8pq	p=15 q=17	2.1361
	UBXQJ4-5875	*	*	2.081
	URQLVU-5870	a+b+4ab/8ab	a=15, b=17	2.136095151
	XDUDN4-5870	(p+r+4pr)/8pr	p=15 r=17	2.1360
	XE9ZZQ-5875	(p+r+4pr)/8pr	p=15 r=17	2.1361
	ZN6PUW-5870	(p+q+4pq)/8pq	p = 15 q = 17	2.1361
	ZTJM2J-5875	(p+q+4pq)/8pq	p=15, q=17	2.14
	ZUV3VK-5870	(p+q+4pq)/8pq	p=15 q=17	2.1361
Statistical Analysis Summary of D18S51			**Likelihood Ratio Mode:**	**2.1361**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D19S433	6FZCYX-5875	(1+2p)/4p	p=14	1.1916
	6W2BMR-5870	(1+2*p)/(4*p)	p = 14 q = 14.2	1.192
	6XFKZX-5870	(1+2p)/4p	p= 14	1.192
	A7C7UT-5870	(1+2p)/4p	p = 14	1.1916
	A9468Q-5870	(1+2p)/4p	p=14	1.1915
	ALR62E-5870	(1+2p)/4p	p=14	1.1916
	D6QRU9-5870	(1+2p)/4p	14	1.1915
	DD3QNJ-5875			1.176
	DHC7X8-5875			1.191
	EKVHAH-5870	(1+2p)/4p	p=14	1.1915
	FFJU9L-5870	1+2p/4p	p=14	1.1915
	GMDLUK-5875	(2p+1)/4p	p=14	1.192
	GT4W4J-5870	(1+2p)/4p	p=14	1.1915
	HLYE94-5875	(1+2a)/4a	a = 14	1.192
	KHUL84-5870	(Z1/2p)+Z0	p=0.3615	1.192
	L3CXUZ-5870	(1+2a)/4a	a=14	1.192
	M6VCVF-5870	(1+2p)/4p	p=14	1.1916
	TK9T64-5875			1.176
	TRTNAE-5870	(1+2p)/4p	p=14	1.1916
	U386FQ-5875	(1+2p)/4p	p=14	1.1916
	UBXQJ4-5875	*	*	1.176
	URQLVU-5870	b+2ab/4ab	a=14, b=14.2	1.191562932
	XDUDN4-5870	(1+2p)/4p	p=14	1.1915
	XE9ZZQ-5875	(1+2p)/4p	p=14	1.1916
	ZN6PUW-5870	(1+2p)/4p	p = 14	1.1916
	ZTJM2J-5875	(1+2p)/4p	p=14	1.19
	ZUV3VK-5870	(1+2p)/4p	p=14	1.1915

Statistical Analysis Summary of D19S433 **Likelihood Ratio Mode: 1.1916**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D21S11	6FZCYX-5875	1/2		.5
	6W2BMR-5870	1/2		0.5000
	6XFKZX-5870	1/2		0.5000
	A7C7UT-5870	1/2		0.5000
	A9468Q-5870	1/2		0.5000
	ALR62E-5870	1/2		0.5000
	D6QRU9-5870	1/2		0.5
	DD3QNJ-5875			0.5000
	DHC7X8-5875			0.500
	EKVHAH-5870	1/2		0.5000
	FFJU9L-5870	1/2		0.5000
	GMDLUK-5875	1/2		0.5000
	GT4W4J-5870	1/2		0.5000
	HLYE94-5875	1/2		0.5000
	KHUL84-5870	Z0		0.5
	L3CXUZ-5870			0.5000
	M6VCVF-5870	1/2		0.5000
	TK9T64-5875			0.5000
	TRTNAE-5870	1/2		0.5
	U386FQ-5875	0.5		0.5
	UBXQJ4-5875	*	*	0.5000
	URQLVU-5870	bc/2bc	b=28, c=32	0.5
	XDUDN4-5870	1/2		0.5000
	XE9ZZQ-5875	1/2	--	0.5000
	ZN6PUW-5870	2/4	-	0.5000
	ZTJM2J-5875	2/4		0.50
	ZUV3VK-5870	1/2		0.5

Statistical Analysis Summary of D21S11 **Likelihood Ratio Mode: 0.5000**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D22S1045	6FZCYX-5875	(p+q+4pq)/8pq	p=13, q=16	18.9429
	6W2BMR-5870	(p+q+4*p*q)/(8*p*q)	p = 13 q = 16	18.94
	6XFKZX-5870	(p+q+4pq)/8pq	p = 13 q = 16	18.94
	A7C7UT-5870	(p+q+4pq)/8pq	p = 13 q = 16	18.9429
	A9468Q-5870	(p+s+4ps)/8ps	p=13, s=16	18.9429
	ALR62E-5870	(p+q+4pq)/8pq	p=13 q=16	18.9429
	D6QRU9-5870	(p+s+4ps)/8ps	13,16	18.9429
	DD3QNJ-5875			8.321
	DHC7X8-5875			18.87
	EKVHAH-5870	(p+q+4pq)/8pq	p=13 q=16	18.9429
	FFJU9L-5870	p+s+4ps/8ps	p=13 s=16	18.9429
	GMDLUK-5875	(p+q+4pq)/8pq	p=13 q=16	18.94
	GT4W4J-5870	(p+s+4ps)/8ps	p=13 s=16	18.9429
	HLYE94-5875	(a+b+4ab)/8ab	a = 13 b = 16	18.94
	KHUL84-5870	((2Z2+Z1(p+q))/(4pq))+Z0	p=0.0069 q=0.3823	18.94
	L3CXUZ-5870	(a+b+4ab)/8ab	a=13 b=16	18.94
	M6VCVF-5870	(p+s+4ps)/8ps	p=13 s=16	18.9429
	TK9T64-5875			8.321
	TRTNAE-5870	(p+q+4pq)/8pq	p=13 q=16	18.9429
	U386FQ-5875	(p+q+4pq)/8pq	p=13 q=16	18.9429
	UBXQJ4-5875	*	*	8.321
	URQLVU-5870	a+b+4ab/8ab	a=13, b=16	18.94291038
	XDUDN4-5870	(p+s+4ps)/8ps	p=13 s=16	18.9429
	XE9ZZQ-5875	(p+s+4ps)/8ps	p=13 s=16	18.9429
	ZN6PUW-5870	(p+q+4pq)/8pq	p = 13 q = 16	18.9429
	ZTJM2J-5875	(p+q+4pq)/8pq	p=13, q=16	18.94
	ZUV3VK-5870	(p+q+4pq)/8pq	p=13 q=16	19.2115
Statistical Analysis Summary of D22S1045			**Likelihood Ratio Mode:**	**18.9429**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
CSF1PO	6FZCYX-5875	(1+p)/2p	p=10	2.7707
	6W2BMR-5870	(2+2*p)/(4*p)	p = 10	2.771
	6XFKZX-5870	(1+p)/2p	p= 10	2.771
	A7C7UT-5870	(1+p)/2p	p = 10	2.7707
	A9468Q-5870	(1+p)/2p	p=10	2.7706
	ALR62E-5870	(1+p)/2p	p=10	2.7707
	D6QRU9-5870	(1+p)/2p	10	2.7706
	DD3QNJ-5875			2.557
	DHC7X8-5875			2.770
	EKVHAH-5870	(1+p)/2p	p=10	2.7706
	FFJU9L-5870	1+p/2p	p=10	2.7706
	GMDLUK-5875	(p+1)/2p	p=10	2.771
	GT4W4J-5870	(1+p)/2p	p=10	2.7706
	HLYE94-5875	(1+a)/2a	a = 10	2.771
	KHUL84-5870	(Z2/p^2)+(Z1/p)+Z0	p=0.2202	2.771
	L3CXUZ-5870	(1+a)/2a	a=10	2.771
	M6VCVF-5870	(1+p)/2p	p=10	2.7707
	TK9T64-5875			2.557
	TRTNAE-5870	(1+p)/2p	p=10	2.7707
	U386FQ-5875	(1+p)/2p	p=10	2.7707
	UBXQJ4-5875	*	*	2.557
	URQLVU-5870	a+a^2/2a^2	a=10	2.770663034
	XDUDN4-5870	(1+p)/2p	p=10	2.7706
	XE9ZZQ-5875	(1+p)/2p	p=10	2.7707
	ZN6PUW-5870	2p(1+p)/(4p^2)	p = 10	2.7707
	ZTJM2J-5875	(2p(1+p))/(2p)^2	p=10	2.77
	ZUV3VK-5870	(1+p)/2p	p=10	2.7706

Statistical Analysis Summary of CSF1PO **Likelihood Ratio Mode: 2.7707**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
FGA	6FZCYX-5875	(1+4q)/8q	q=24	1.4308
	6W2BMR-5870	(1+4*r)/(8*r)	p = 21 q = 22 r = 24	1.431
	6XFKZX-5870	(1+4p)/8p	p = 24	1.431
	A7C7UT-5870	(1+4p)/8p	p = 24	1.4308
	A9468Q-5870	(1+4s)/8s	s=24	1.4307
	ALR62E-5870	(1+4p)/8p	p=24	1.4307
	D6QRU9-5870	(1+4s)/8s	24	1.4307
	DD3QNJ-5875			1.392
	DHC7X8-5875			1.430
	EKVHAH-5870	(1+4p)/8p	p=24	1.4307
	FFJU9L-5870	1+4s/8s	s=24	1.4307
	GMDLUK-5875	(1+4p)/8p	p=24	1.431
	GT4W4J-5870	(1+4s)/8s	s=24	1.4307
	HLYE94-5875	(1+4a)/8a	a = 24	1.431
	KHUL84-5870	(Z1/4p)+Z0	p=0.1343	1.431
	L3CXUZ-5870	(1+4a)/8a	a=24	1.431
	M6VCVF-5870	(1+4s)/8s	s=24	1.4308
	TK9T64-5875			1.392
	TRTNAE-5870	(1+4p)/8p	p=24	1.4308
	U386FQ-5875	(1+4p)/8p	p=24	1.4308
	UBXQJ4-5875	*	*	1.392
	URQLVU-5870	c+4bc/8bc	b=24, c=22	1.430752048
	XDUDN4-5870	(1+4s)/8s	s=24	1.4307
	XE9ZZQ-5875	(1+4s)/8s	s=24	1.4308
	ZN6PUW-5870	(1+4p)/8p	p = 24	1.4308
	ZTJM2J-5875	(1+4p)/8p	p=24	1.43
	ZUV3VK-5870	(1+4p)/8p	p=24	1.4307

Statistical Analysis Summary of FGA **Likelihood Ratio Mode: 1.4307**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaD	6FZCYX-5875	(1+4q)/8q	q=13	1.1355
	6W2BMR-5870	(1+4*r)/(8*r)	p = 10 q = 11 r = 13	1.135
	6XFKZX-5870	(1+4p)/8p	p = 13	1.135
	A7C7UT-5870	(1+4p)/8p	p = 13	1.1355
	A9468Q-5870	(1+4s)/8s	s=13	1.1354
	ALR62E-5870	(1+4p)/8p	p=13	1.1355
	D6QRU9-5870	(1+4r)/8r	13	1.1354
	DHC7X8-5875			1.135
	EKVHAH-5870	(1+4p)/8p	p=13	1.1354
	FFJU9L-5870	1+4s/8s	s=13	1.1354
	GMDLUK-5875	(1+4p)/8p	p=13	1.135
	GT4W4J-5870	(1+4s)/8s	s=13	1.1354
	HLYE94-5875	(1+4a)/8a	a = 13	1.135
	KHUL84-5870	(Z1/4p)+Z0	p=0.1967	1.135
	L3CXUZ-5870	(1+4a)/8a	a=13	1.135
	M6VCVF-5870	(1+4s)/8s	s=13	1.1355
	TRTNAE-5870	(1+4p)/8p	p=13	1.1355
	U386FQ-5875	(1+4p)/8p	p=13	1.1355
	URQLVU-5870	c+4bc/8bc	b=13, c=11	1.135485511
	XDUDN4-5870	(1+4s)/8s	s=13	1.1354
	XE9ZZQ-5875	(1+4s)/8s	s=13	1.1355
	ZN6PUW-5870	(1+4p)/8p	p = 13	1.1355
	ZTJM2J-5875	(1+4p)/8p	p=13	1.14
	ZUV3VK-5870	(1+4p)/8p	P=13	1.1354

Statistical Analysis Summary of PentaD **Likelihood Ratio Mode: 1.1355**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaE	6FZCYX-5875	1/2		.5
	6W2BMR-5870	1/2		0.5000
	6XFKZX-5870	1/2		0.5000
	A7C7UT-5870	1/2		0.5000
	A9468Q-5870	1/2		0.5000
	ALR62E-5870	1/2		0.5000
	D6QRU9-5870	1/2		0.5
	DHC7X8-5875			0.500
	EKVHAH-5870	1/2		0.5000
	FFJU9L-5870	1/2		0.5000
	GMDLUK-5875	1/2		0.5000
	GT4W4J-5870	1/2		0.5000
	HLYE94-5875	1/2		0.5000
	KHUL84-5870	Z0		0.5
	L3CXUZ-5870			0.5000
	M6VCVF-5870	1/2		0.5000
	TRTNAE-5870	1/2		0.5
	U386FQ-5875	0.5		0.5
	URQLVU-5870	cd/2cd	c=13, d=14	0.5
	XDUDN4-5870	1/2		0.5000
	XE9ZZQ-5875	1/2	--	0.5000
	ZN6PUW-5870	2/4	-	0.5000
	ZTJM2J-5875	2/4		0.50
	ZUV3VK-5870	1/2		0.5
Statistical Analysis Summary of PentaE			**Likelihood Ratio Mode:**	**0.5000**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
SE33	6FZCYX-5875	(1+4p)/8p	p=15	3.6095
	6W2BMR-5870	(1+4*p)/(8*p)	p = 15 q = 21 r = 22.2	3.609
	6XFKZX-5870	(1+4p)/8p	p = 15	3.609
	A7C7UT-5870	(1+4p)/8p	p = 15	3.6095
	A9468Q-5870	(1+4p)/8p	p=15	3.6094
	ALR62E-5870	(1+4p)/8p	p=15	3.6094
	D6QRU9-5870	(1+4p)/8p	15	3.6094
	DD3QNJ-5875			3.063
	EKVHAH-5870	(1+4p)/8p	p=15	3.6094
	FFJU9L-5870	1+4p/8p	p=15	3.6094
	GMDLUK-5875	(1+4p)/8p	p=15	3.609
	GT4W4J-5870	(1+4p)/8p	p=15	3.6094
	HLYE94-5875	(1+4a)/8a	a = 15	3.609
	KHUL84-5870	(Z1/4p)+Z0	p=0.0402	3.609
	L3CXUZ-5870	(1+4a)/8a	a=15	3.609
	M6VCVF-5870	(1+4p)/8p	p=15	3.6095
	TK9T64-5875			3.063
	TRTNAE-5870	(1+4p)/8p	p=15	3.6095
	U386FQ-5875	(1+4p)/8p	p=15	3.6095
	UBXQJ4-5875	*	*	3.063
	URQLVU-5870	c+4ac/8ac	a=15, c=21	3.609452736
	XDUDN4-5870	(1+4p)/8p	p=15	3.6094
	XE9ZZQ-5875	(1+4p)/8p	p=15	3.6095
	ZN6PUW-5870	(1+4p)/8p	p = 15	3.6095
	ZTJM2J-5875	(1+4p)/8p	p=15	3.61
	ZUV3VK-5870	(1+4p)/8p	p=15	3.6094
Statistical Analysis Summary of SE33			**Likelihood Ratio Mode:**	**3.6094**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TH01	6FZCYX-5875	(1+4p)/8p	p=7	1.1447
	6W2BMR-5870	(1+4*p)/(8*p)	p = 7 q = 8 r = 9.3	1.145
	6XFKZX-5870	(1+4p)/8p	p = 7	1.145
	A7C7UT-5870	(1+4p)/8p	p = 7	1.1447
	A9468Q-5870	(1+4p)/8p	p=7	1.1446
	ALR62E-5870	(1+4p)/8p	p=7	1.1447
	D6QRU9-5870	(1+4p)/8p	7	1.1446
	DD3QNJ-5875			1.132
	DHC7X8-5875			1.144
	EKVHAH-5870	(1+4p)/8p	p=7	1.1446
	FFJU9L-5870	1+4p/8p	p=7	1.1446
	GMDLUK-5875	(1+4p)/8p	p=7	1.145
	GT4W4J-5870	(1+4p)/8p	p=7	1.1446
	HLYE94-5875	(1+4a)/8a	a = 7	1.145
	KHUL84-5870	(Z1/4p)+Z0	p=0.1939	1.145
	L3CXUZ-5870	(1+4a)/8a	a=7	1.145
	M6VCVF-5870	(1+4p)/8p	p=7	1.1447
	TK9T64-5875			1.132
	TRTNAE-5870	(1+4p)/8p	p=7	1.1447
	U386FQ-5875	(1+4p)/8p	p=7	1.1447
	UBXQJ4-5875	*	*	1.132
	URQLVU-5870	c+4ac/8ac	a=7, c=9.3	1.144662197
	XDUDN4-5870	(1+4p)/8p	p=7	1.1446
	XE9ZZQ-5875	(1+4p)/8p	p=7	1.1447
	ZN6PUW-5870	(1+4p)/8p	p = 7	1.1447
	ZTJM2J-5875	(1+4p)/8p	p=7	1.14
	ZUV3VK-5870	(1+4p)/8p	p=17	1.1446
Statistical Analysis Summary of TH01			**Likelihood Ratio Mode:**	**1.1447**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TPOX	6FZCYX-5875	(1+2p)/4p	p=8	.9763
	6W2BMR-5870	(1+2*q)/(4*q)	q = 8 p = 11	0.9763
	6XFKZX-5870	(1+2p)/4p	p = 8	0.9763
	A7C7UT-5870	(1+2p)/4p	p = 8	0.9763
	A9468Q-5870	(1+2p)/4p	p=8	0.9762
	ALR62E-5870	(1+2p)/4p	p=8	0.9763
	D6QRU9-5870	(1+2p)/4p	8	0.9762
	DD3QNJ-5875			0.9730
	DHC7X8-5875			0.9763
	EKVHAH-5870	(1+2p)/4p	p=8	0.9762
	FFJU9L-5870	1+2p/4p	p=8	0.9762
	GMDLUK-5875	(2p+1)/4p	p=8	0.9763
	GT4W4J-5870	(1+2p)/4p	p=8	0.9762
	HLYE94-5875	(1+2a)/4a	a = 8	0.9763
	KHUL84-5870	(Z1/2p)+Z0	p=0.5249	0.9763
	L3CXUZ-5870	(1+2a)/4a	a=8	0.9763
	M6VCVF-5870	(1+2p)/4p	p=8	0.9763
	TK9T64-5875			.9730
	TRTNAE-5870	(1+2p)/4p	p=8	0.9763
	U386FQ-5875	(1+2p)/4p	p=8	0.9763
	UBXQJ4-5875	*	*	0.9730
	URQLVU-5870	b+2ab/4ab	a=8, b=11	0.976281196
	XDUDN4-5870	(1+2p)/4p	p=8	0.9762
	XE9ZZQ-5875	(1+2p)/4p	p=8	0.9763
	ZN6PUW-5870	(1+2p)/4p	p = 8	0.9763
	ZTJM2J-5875	(1+2p)/4p	p=8	0.98
	ZUV3VK-5870	(1+2p)/4p	p=8	0.9762

Statistical Analysis Summary of TPOX **Likelihood Ratio Mode: 0.9763**

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
vWA	6FZCYX-5875	(1+2p)/4p	p=18	1.7364
	6W2BMR-5870	(1+2*q)/(4*q)	p = 16 q = 18	1.736
	6XFKZX-5870	(1+2p)/4p	p = 18	1.736
	A7C7UT-5870	(1+2p)/4p	p = 18	1.7364
	A9468Q-5870	(1+2r)/4r	r=18	1.7364
	ALR62E-5870	(1+2p)/4p	p=18	1.7364
	D6QRU9-5870	(1+2r)/4r	18	1.7363
	DD3QNJ-5875			1.659
	EKVHAH-5870	(1+2p)/4p	p=18	1.7364
	FFJU9L-5870	1+2r/4r	r=18	1.7363
	GMDLUK-5875	(2p+1)/4p	p=18	1.736
	GT4W4J-5870	(1+2r)/4r	r=18	1.7364
	HLYE94-5875	(1+2a)/4a	a = 18	1.736
	KHUL84-5870	(Z1/2p)+Z0	p=0.2022	1.736
	L3CXUZ-5870			1.000
	M6VCVF-5870	(1+2r)/4r	r=18	1.7364
	TK9T64-5875			1.659
	TRTNAE-5870	(1+2p)/4p	p=18	1.7364
	U386FQ-5875	(1+2p)/4p	p=18	1.7364
	UBXQJ4-5875	*	*	1.659
	URQLVU-5870	b+2ab/4ab	a=18, b=16	1.736399604
	XDUDN4-5870	(1+2r)/4r	r=18	1.7364
	XE9ZZQ-5875	(1+2r)/4r	r=18	1.7364
	ZN6PUW-5870	(1+2p)/4p	p = 18	1.7364
	ZTJM2J-5875	(1+2p)/4p	p=18	1.74
	ZUV3VK-5870	(1+2p)/4p	p=18	1.7363
Statistical Analysis Summary of vWA			**Likelihood Ratio Mode:**	**1.7364**

Kinship DNA Statistics

Is the claim of the following relationship supported by the genetic evidence: **Half Sibling**?

TABLE 7

WebCode-Test	Kinship Index	Claim Supported?
6FZCYX-5875	5,423.9817	Yes
6W2BMR-5870	9418	Yes
6XFKZX-5870	9419	Yes
A7C7UT-5870	9418.1997	Yes
A9468Q-5870	9418.1996	Yes
ALR62E-5870	9418.1997	Yes
D6QRU9-5870	9,411.49	Yes
DD3QNJ-5875	670	Yes
DHC7X8-5875	1,500.000	Yes
EKVHAH-5870	9418.1996	Yes
FFJU9L-5870	9418.1996	Yes
GMDLUK-5875	9418	Yes
GT4W4J-5870	9418.1996	Yes
HLYE94-5875	9.418E+03	Yes
KHUL84-5870	9400	Yes
L3CXUZ-5870	5424	Yes
M6VCVF-5870	9418.6772	Yes
TK9T64-5875	670	Yes
TRTNAE-5870	KI=9,400 (9419)	Yes
U386FQ-5875	9418.1997	Yes
UBXQJ4-5875	670	Yes
URQLVU-5870	9418	Inconclusive
XDUDN4-5870	9418.1996	Yes
XE9ZZQ-5875	9418.1997	Yes
ZN6PUW-5870	1.5 x 10^3	Yes
ZTJM2J-5875	9.4E+03	Yes
ZUV3VK-5870	9.5493x10^3	Inconclusive

Response Summary	Participants: 27
Is the relationship claim of Half Sibling supported?	
Yes	25
No	0
Inconclusive	2

Additional Kinship Statistical Results

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
6FZCYX-5875	vWA is ignored due to linkage with D12S391. The chance of generating a false positive with a CRI of greater than 10 is less than 1.51%.
6XFKZX-5870	There is a strong evidence to indicate that subjects A and B to be related as half siblings. The probability of kinship is 99.9894% as calculated based on the NIST STRBASE Caucasian Population Database.
A9468Q-5870	There is strong evidence to indicate that A and B are half-sibling. The probability of kinship is 99.9893% as calculated based on the NIST STRBASE Caucasian Population Database.
ALR62E-5870	Taking into account the LR value obtained, it is 9418.1997 more likely to show that individuals A and B have a biological relationship of half a maternal brotherhood than if they were not related.
DD3QNJ-5875	The reported values are Kinship Index (KI) values calculated using KIn CALc v6.0 BFS software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of x/N. Due to possible genetic linkage between the vWA and D12S391 loci, the genotypes from only one of these loci were reported and used to calculate the combined KI. 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.
EKVHAH-5870	There is a strong evidence to indicate that A and B are half siblings. The probability of kinship is 99.9893% based on the NIST STRBASE Caucasian Population Database.
FFJU9L-5870	There is strong evidence to indicate that the subjects are related as maternal half sibling. The probability of kinship is 99.9893% based on the NIST STRBASE Caucasian Population Database.
GT4W4J-5870	There is a strong evidence to indicate that A and B are half siblings. The probability of kinship is 99.9893% as calculated based on the NIST STRBASE Caucasian Population Database.
KHUL84-5870	Where allele identical by decent values are: Z0=0.5, Z1=0.5, Z2=0
L3CXUZ-5870	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. Before the linkage correction, a LR of 1.736 was calculated using formula (1+2a)/4a and a=18 for locus vWA, with a CLR of 9418.
M6VCVF-5870	There is strong evidence to indicate that the subjects are related as maternal half sibling. The probability of kinship is 99.9894% based on the NIST STRBASE Caucasian Population Database.
TK9T64-5875	The likelihood ratios shown above were calculated using the KinCALc software (v6.0 BFS) that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of x/N. The combined KI (Caucasian) shown above does not include D12S391. D12S391 was removed due to possible genetic linkage with vWA. The Penta D and Penta E loci were not calculated as these loci are not tested in this in this laboratory. The combined KI (Caucasian) is only calculated to two significant figures by the KinCALc software.
TRTNAE-5870	It is approximately 9,400 times more likely to obtain these profiles if they originate from half siblings, rather than if they originate from two unknown, unrelated individuals in the general population.
U386FQ-5875	AABB requires that the following statement be added to the report: 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.)

TABLE 8

WebCode-Test	Additional Statistical Results and Relationship Conclusions
UBXQJ4-5875	* The likelihood ratios were calculated with the KinCALc software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probablities with no rounding and a 1/k instead of x/N. The KinCALc software uses the NIST STRBase Population Database. The locus D12S391 was omitted due to linkage with VWA. Also we do not test PentaD and PentaE in our laboratory so those loci were not evaluated. The individuals were reported to be Caucasian; therefore only values for Caucasian were reported.
URQLVU-5870	Reference: Butler, J. 2010. Fundamentals of Forensic DNA Typing. Elsevier.Inc.
XDUDN4-5870	There is strong evidence to indicate that A and B are half-siblings. The probability of kinship is 99.9893% as calculated based on the NIST STRBASE Caucasian Population Database.
XE9ZZQ-5875	Combined half sibship index = 9418.1997. Probability of full sibship = 99.9894% (50% prior probability). AABB RT Standard 5.3.8.2 states that likelihood ratios greater than 10 shall be considered genetic evidence supporting the tested relationship. 100% of the ratios above this value have been found to be associated with a true second-degree relationship between the tested parties.
ZTJM2J-5875	based on the given profiles, the "maternal caucasian half sibling relationship between the two given male" proposition is 9418 times more probable than the "unrelated" proposition
ZUV3VK-5870	It is necessary to have the genetic profiles of the biological parents (mother and father) of both individuals, in order to establish a kinship relationship accurately.

Additional Comments

TABLE 9

WebCode-Test	Additional Comments
2N3EDK-5875	For item 3, individual PIs for loci not calculated for excluded individuals. For item 4, SE33 not used for statistics at the [Laboratory].
6FZCYX-5875	DYS19 has been ignored in the Y STR analysis.
6JDCWN-5870	Reported Hispanic PI and Probability for Item 4. Per SOP, locus D12S391 is not included in calculations. No PI values reported for item 3 since excluded as possible father.
6V8NBM-5870	D12S391 is omitted from calculations, as per laboratory policy. The CPI is truncated to 2 significant figures, as per laboratory policy. PI values reported as provided from calculations using the NIST 1036 U.S. Population Dataset. Probability of paternity truncated at 4 digits past the decimal point, as per laboratory policy.
6W2BMR-5870	Relationship indices for locus D12S391 were not included in the calculation of paternity indices for Part 1 due to the possibility of linkage with the vWA locus. However, locus D12S391 was included in the half-sibship calculation for Part III. A theta value of 0.01 was used in the calculation of PIs for Part I but not Part III.
6XFKZX-5870	Amplification: Item 1, Item 2, Item 3 and Item 4 were amplified using Applied Biosystems™ GlobalFiler™ Express PCR Amplification Kit on the Applied Biosystems™ Proflex™ 96-well PCR System. With in-situ method, Item 3 and Item 4 were also amplified using Applied Biosystems™ AmpFLSTR™ YFiler™ PCR Amplification Kit on the Applied Biosystems™ GeneAmp™ PCR System 9700. Electrophoresis: Electrophoresis was carried out on the Applied Biosystems™ 3500xL Genetic Analyzer and the data were analyzed using GeneMapper™ ID-X Software v1.5. Quality Control: Reagent Blank, Positive Control and Negative Control were included throughout the analysis and all gave intended results. Statistical Evaluation: The statistical formulas were derived from DNAView Statistical Software and the paternity / kinship index was calculated using Microsoft Office Excel. On comparison to the DNA profiles obtained, I found that the donor of bloodstained specimen "Item 4" is the biological father to the donor of bloodstained specimen "Item 2". (Given that the biological mother is represented by the donor of bloodstained specimen "Item 1"). Remark: 'NM' denotes non-male profile.
7B3ABN-5870	Paternity indices, combined paternity index, and probability of paternity were reported using the Hispanic population values based on information provided in the test scenario. Genetic locus D12S391 was not used for paternity index calculations per laboratory's standard operating procedures. Paternity index calculations were not generated for item 3 due to exclusion as biological father.
8UDG7G-5870	Our laboratory does not calculate a Paternity Index. Per our SOP, we identify obligate alleles which are used to calculate a "Random Man Not Excluded" (RMNE) statistic. For this case, the obligate alleles were as follows: D3 (15,16), vWA (17), D16 (9,13), CSF (10,12), TPOX (11), D8 (13), D21 (30.2), D18 (16), D2S441 (10), D19 (15.2), TH01 (6), FGA (21), D22 (11), D5 (11,12), D13 (8), D7 (10), SE33 (21.2), D10 (13), D1 (13), D12 (19), and D2S1338 (19). RMNE report statement: The expected frequency of individuals who could be the father of #2 is less than 1 in 86 billion in the general male population. NR = No Result. NT = Not Tested.
9279QF-5870	Paternity indices were not calculated for Item 3, per laboratory policy, due to exclusion.
9DFT9M-5875	overall PI reported omitting vWA due to linkage with D12S391; however both loci included in per-locus PI. Reported statistic uses the southwest hispanic FBI database (including all per-locus PI values)
A2KYBK-5870	* Per agency policy, D12S391 is not used for PI calculations due to linkage with vWA. * Per case information and agency policy, Hispanic PI values are reported here.

TABLE 9

WebCode-Test	Additional Comments
A7C7UT-5870	1. Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method while Item 3 and Item 4 were re-extracted using Chelex extraction method. 2. Item 3 and Item 4 were quantified using Quantifiler Human DNA Quantification Kit on the Applied Biosystem Real Time Polymerase Chain Reaction (PCR) 7500 System. 3. Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express PCR Amplification Kit while re-extracted samples of Item 3 and Item 4 were amplified using Globalfiler PCR Amplification Kit on 9700 GeneAmp PCR System. Y-STR (Y-Short Tandem Repeat) amplification was carried out on Item 3 and Item 4 using AmpFLSTR Y-filer PCR Amplification kit on the 9700 GeneAmp PCR System. 4. Electrophoresis was carried out on the Applied Biosystems 3500xl Genetic Analyser and results were analysed using GeneMapper ID-X Software for Item 1, Item 2, Item 3 and Item 4. 5. Reagent blank, positive control and negative control were analysed throughout the analysis and all gave the intended results. 6. NM = non-male profile. 7. NA = not applicable.
A9468Q-5870	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 3 and Item 4 were further amplified using AmpFLSTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5. Electrophoresis: - Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). - Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6. Quality Control: - Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7. The statistical formula was derived from DNAView Statistical Software and calculated using Microsoft Excel. Remark: 'NM' denotes non-male profile.
ADDJRB-5875	As per policy of the [Laboratory], SE33 was not used when calculating the paternity statistics. PI statistics were not calculated for exclusions.
AJZ9CK-5870	Locus D12S391 not utilized for statistics due to possible linkage with vWA (as per SOPs).
B6EBQG-5870	Per our laboratory manual, no LR calculations are performed for an alleged father who can be visually eliminated by three or more inconsistencies. So, no statistics were provided for Item 3 (alleged father A). Per our laboratory manual, no statistics were calculated for D12S391 due to potential linkage with vWA for distant relatives. Per our laboratory manual, the combined paternity index value was truncated to 2 significant figures and the probability of paternity truncated to four places after the decimal. Part III kinship test was not performed since our laboratory does not provide half-sibling analysis.
DD3QNJ-5875	For Part I - PI values at specific loci, Part II - Combined PI value, and Part III - Kinship DNA Statistics: the reported values are Kinship Index (KI) values calculated using Kin CALc v6.0 BFS software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of x/N. Due to possible genetic linkage between the vWA and D12S391 loci, the genotypes from only one of these loci were reported and used to calculate the combined KI. For Part II: our laboratory does not report Probabilities of Paternity.

TABLE 9

WebCode-Test	Additional Comments
EKVHAH-5870	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 3 and Item 4 were further amplified using AmpFlSTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5. Electrophoresis: -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6. Quality Control: -Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7. The statistical formula was derived from DNAView Statistical Software and calculated using Microsoft Excel. Remark: 'NM' denotes non-male profile.
EZBJ79-5870	NR = No Results
FFJU9L-5870	Extraction: Item 1, Item 2, Item 3 and Item 4 were extracted using the in-situ extraction method. Amplification: Item 1, Item 2, Item 3 and Item 4 were amplified using the Globalfiler Express PCR Amplification kit on the 9700 GeneAmp PCR System. Y-STR (Y-Short Tandem Repeat) amplification was carried out on Item 3 and Item 4 using the AmpFlSTR Y-filer PCR Amplification kit on the 9700 GeneAmp PCR System. Electrophoresis: Electrophoresis was carried out on the Applied Biosystems 3500xL Genetic Analyzer with GeneMapper ID-X Software for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). Electrophoresis for Y-Filer was carried out on the Applied Biosystems 3500xl Genetic Analyzer with GeneMapper ID-X Software for Item 3 and Item 4. Quality Control: Reagent blank, positive control and negative control were carried out throughout the analysis and all gave intended results. Abbreviation: NM : Non-male Profile.
GBJ66J-5870	No locus PIs given for Item 3 because they were manually excluded as the possible father.
GGB9FB-5870	According to laboratory policy, the most conservative ethnic group was reported, the Combined Paternity Index value was truncated to two significant figures, and D12S391 was not included in the statistical calculation.
GT4W4J-5870	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 the bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 2.On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 3" is NOT the biological father to the source of the bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 3. Item 1, Item 2, Item 3 and Item 4 were extracted using in situ method. 4. Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. -Item 3 and Item 4 were further amplified using AmpFlSTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5. Electrophoresis: -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globafiler Express). -Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6. Quality Control: -Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7. The statistical formula was derived from DNAView Statistical Software and calculated using Microsoft Excel. Remark: 'NM' denotes non-male profile.
GWJ4RJ-5870	No statistics run for Item 3, visually excluded as potential father. Only lowest LR reported out, so that subpopulation used for PIs and probability of parentage.
H6ENA6-5875	We did not fill out the Kinship DNA Statistics section which is not applicable in our laboratory.

TABLE 9

WebCode-Test	Additional Comments
H8FMDJ-5870	The local/state database does not include allele frequencies for the Hispanic population thus the population with the most conservative frequency of occurrence was used as per the standard procedure of this laboratory.
HPKWQN-5870	No allele frequency data available in national population database for allele 6 at TPOX - locus ignored in calculation. D12 ignored in calculation as this loci is linked to vWA.
JPRVX3-5870	For paternity testing, DNAview software was used to calculate LRs, which was reported as the Combined Paternity Index value. The probability of paternity is not a DNAview output statistic. Individual locus PIs were not reported for Item 3 as DNAview software was used as a screening method and excluded Item 3 as the father. Under the Item 4 tab, "N/A" was reported for vWA PI since it is linked with D12S391 for all calculations. Loci D6S1043, PentaE and PentaD were not used for kinship calculations.
JQAPYD-5870	D12S391 is omitted from the final calculation, as per laboratory policy. The PI values are truncated to 2 digits past the decimal point. 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.
LYCLXZ-5875	Our laboratory does not report PI calculations when the alleged father is excluded. VWA was not used in calculating the PI due to possible linkage with D12S391. Part III is not applicable to our laboratory.
M6VCVF-5870	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 “Item2” (given that the biological mother is represented by the source of bloodstain specimen “Item 1”). 3) Extraction: Item 1, Item 2, Item 3 and Item 4 were punched using 1.2mm size puncher and the FTA disc subjected for direct amplification. 4) Amplification: Item 1, Item 2, Item 3 and Item 4 were amplified using GlobalFiler Express PCR Amplification Kit on Applied Biosystem Proflex PCR System. Item 3 and Item 4 were further amplified using AmpFLSTR Y-Filer PCR Amplification Kit on Applied Biosystem Proflex PCR System. 5)Electrophoresis: Electrophoresis was carried out using Genetic Analyzer 3500 for all amplified product of GlobalFiler Express and YFiler Amplification kit. 6) Quality Control: Reagent Blank, Positive Control and Negative Control were incorporated in the overall analysis and gave expected results. 7) The statistical formula were derived from DNAView Statistical Software and calculated using Microsoft Excel. 8) NM : Non-male profile
MCXGQ6-5870	The Combined Paternity Index value truncated to two (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 generated for samples that are eliminated as possible biological parent (father). Kinship DNA Statistics section is not applicable.
NDQTMW-5875	NR = No Result. The Southwest Hispanic population was used for reporting paternity statistics.
P2NRMX-5870	CURRENTLY, THE LABORATORY DOES NOT DO SIBSHIP
P4FQ2V-5875	[Laboratory] is not currently online with kinship statistics.
QAGHMY-5870	Due to linkage disequilibrium observed between vWA and D12S391 for kinship samples, D12S391 will not be used in the paternity calculation.

TABLE 9

WebCode-Test	Additional Comments
QF4DKV-5870	For paternity testing, DNAview software was used to calculate LRs, which was reported as the Combined Paternity Index value. The probability of paternity is not a DNAview output statistic. Individual locus PIs were not reported for Item 3 as the DNAview software was used as a screening method and excluded Item 3 as the father. Under the Item 4 tab, "N/A" was reported for locus vWA's PI since it is linked with D12S391 for all calculations. Loci D6S1043, PentaE, and PentaD were not used for kinship calculations.
RBM6WW-5870	As observed during our sample analysis, the alleged father is for kinship relationship with a female child. According to our laboratory procedure, it is not necessary to obtain Y-Filer profile for this specific essay. Which is why we left it blank. With the provided information and after we obtained Item 1 profile (Known parent, hispanic mother) we can assume that the kinship relationship between Item 1 and the female child (Item 2) is biological mother- biological child; which is why the statistics used for Paternity index in this essay includes both Item 1 and the alleged father B (Item 4) to obtain the Paternity Idex (PI). Meaning, we use Item 1 (Known parent, mother)+ Item 2 (child) + Item 4 (alleged father B) to obtain the complementary statistics records. For the Kinship DNA worksheet, Half-sibling relationship, it doesn't apply in our laboratory. Also, it's not related to this essay; which is why we left it blank.
RU2KHX-5870	Procedure requires vWA be left out of statistical calculation. We only calculate CPI, not a probability of paternity.
T2XVRZ-5870	Part 1: D12S391 is omitted from calculation/PI reporting, as per laboratory policy. Part 2: The Combined Paternity Index value is TRUNCATED to 2 significant figures, per laboratory policy. The Probability of Paternity is TRUNCATED at four places past the decimal, per laboratory policy. Part 3: Half-sibling calculations are not performed/calculated at the laboratory.
TK9T64-5875	For the paternity statistics, the likelihood ratios entered were calculated using the KinCALc software (v6.0 BFS) that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of x/N. The combined PI (Hispanic) shown does not include D12S391. D12S391 was removed due to possible genetic linkage with vWA. This laboratory does not report probability of paternity and so this value was not calculated.
UBXQJ4-5875	The paternity indexes were calculated with the KinCALc software that uses standard formulae for simple PI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and 1/k instead of just x/N. The KinCALc software uses the NIST STRBase Population Database. The locus D12S391 was omitted due to linkage with VWA for Item 4, since Item 3 was an exclusion all loci were included. The Individuals were reported to be Hispanic; therefore only values for Hispanic were reported. The GlobalFiler and MiniFiler data are concordant.
ULXG3P-5870	NR = No Result
URQLVU-5870	According to internal laboratory guidelines, it is not possible to confirm or rule out the possibility of half-siblings parentage. The kinship index is less than 10,000 (below 99.99%), there for it doesn't provide enough support for the conclusion. Additional analysis are necessary (more genetic markers and chromosome X haplotypes). In cases where not enough evidence is obtained, the laboratory requests to refer a direct relative (mother).
VY3YDP-5875	SE33 not used for statistics in laboratory procedure.
W7F8ER-5870	NR = No Results
W8TZ9T-5870	Due to linkage disequilibrium between vWA and D12S391 for kinship samples, the reported CPI was calculated using vWA, but not D12S391.

TABLE 9

WebCode-Test	Additional Comments
XDUDN4-5870	1. I found that the donor of bloodstain specimen “Item 4” is the biological father to the donor of bloodstain specimen “Item 2” (given that the biological mother is represented by the donor of bloodstain specimen "Item 1"). 2. On comparison to the DNA profiles obtained, I found that the donor of bloodstain specimen "Item 3" is NOT the biological father to the donor of bloodstain specimen "Item 2" (given that the biological mother is represented by the donor of bloodstain specimen "Item 1"). 3. Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method and amplified using Globalfiler Express Amplification Kit on Proflex PCR System. 4. Item 3 and Item 4 were amplified using AmpFLSTR Yfiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. 5. Electrophoresis were carried out using Applied Biosystem 3500xL Genetic Analyzer. 6. Reagent blank, Positive Control and Negative Control were carried out along with the analysis. 7. The statistical formula were derived by DNA View Statistical Software and calculated using Microsoft Excel. 8. NM: Represent non-male profile.
ZCRPX4-5870	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. Locus specific PI's only available for those loci used for comparison in DNAview ver 27.23.
ZN6PUW-5870	Part I: 1) The laboratory does not use D12S391 for paternity DNA statistics. 2) The laboratory excludes the alleged parent as biological parent of the child when there are ≥ 3 loci with genetic inconsistencies; the PI is not calculated. Part II: 1) The laboratory uses the all-ethnicities dataset (n=1036) for paternity DNA statistics. 2) ‘^’ refers to ‘to the power of’. 3) The laboratory uses a prior probability of 0.5 to calculate the Probability of Paternity. Part III: 1) The laboratory does not use D12S391 for kinship DNA statistics. 2) ‘^’ refers to ‘to the power of’.

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 24-5870: DNA Parentage

DATA MUST BE SUBMITTED BY **April 15, 2024, 11:59 p.m. EDT** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A WebCode: U2DEAC

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

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

Items Submitted (Sample Pack DPF1 - FTA™ Micro Cards):
Item 1: Blood Sample from Known Parent (Hispanic Mother)
Item 2: Blood Sample from Known Child (Hispanic Daughter)
Item 3: Blood Sample from Alleged Father A (Hispanic)
Item 4: Blood Sample from Alleged Father B (Hispanic)

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

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

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

Part I: DNA Analysis for Item 1

STR Amplification Kit(s) Used:

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

☐ Identifiler® ☐ GlobalFiler™ ☐ Investigator® 24plex

☐ PowerPlex® Other

Report the Paternity Software used (if applicable):

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

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

Part I (continued): DNA Analysis for Item 2

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

☐ Identifiler® ☐ GlobalFiler™ ☐ Investigator® 24plex

☐ PowerPlex® Other

Report the Paternity Software used (if applicable):

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

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

Part I (continued): DNA Analysis for Item 3

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

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

☐ Identifiler® ☐ GlobalFiler™ ☐ Investigator® 24plex

☐ PowerPlex® Other

Report the Paternity Software used (if applicable):

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

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

YSTR results are for proficiency concordance only.

YSTR Amplification Kit(s) Used: Please check all the brands that apply for this item and record only additional kit specific information in the blank provided (i.e. Plus, 23, etc.).

☐ YFiler™ ☐ PowerPlex® Y Other

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

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

Part I (continued): DNA Analysis for Item 4

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

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

☐ Identifiler® ☐ GlobalFiler™ ☐ Investigator® 24plex

☐ PowerPlex® Other

Report the Paternity Software used (if applicable):

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

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

YSTR results are for proficiency concordance only.

YSTR Amplification Kit(s) Used: Please check all the brands that apply for this item and record only additional kit specific information in the blank provided (i.e. Plus, 23, etc.).

☐ YFiler™ ☐ PowerPlex® Y Other

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

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

Part I (continued): DNA Analysis - Additional DNA

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

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

Part II: PATERNITY DNA STATISTICS

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

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

For the selected alleged parent, please utilize your own lab protocols regarding ethnicity and choose one of the following population databases for all statistical calculations in this test:

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

1. Choose a Population Database:

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

    Other Pop. Database:

2. Record the Combined Paternity Index value:

3. Record the Probability of Paternity:

Part III: KINSHIP DNA STATISTICS

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

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

Example: Questioned Half Sibling Relationship

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

Scenario:

The two DNA profiles below are presented as a potential Maternal Caucasian Half Sibling relationship between two males. 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	12,17.3	16,16	12: 0.1163 17.3: 0.1330	16: 0.1357			
D2S1338	17,20	17,17	17: 0.1856	20: 0.1565			
D2S441	11,11	11,11	11: 0.3435				
D3S1358	15,18	15,16	15: 0.2729 18: 0.1510	16: 0.2382			
D5S818	11,13	9,11	9: 0.0416 13: 0.1427	11: 0.3560			

Locus	A	B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
D7S820	9,11	8.1,9	8.1: 0.0014	9: 0.1676			
			11: 0.2050				
D8S1179	12,14	11,13	11: 0.0762	12: 0.1676			
			13: 0.3296	14: 0.1662			
D10S1248	15,15	14,15	14: 0.2978	15: 0.1967			
D12S391	16,19	16,21	16: 0.0222	19: 0.1247			
			21: 0.1288				
D13S317	8,11	8,11	8: 0.1205	11: 0.3255			
D16S539	12,12	11,12	11: 0.3144	12: 0.3144			
D18S51	15,17	15,17	15: 0.1704	17: 0.1385			
D19S433	14,14	14,14.2	14: 0.3615	14.2: 0.0235			
D21S11	30,30	28,32	28: 0.1593	30: 0.2825			
			32: 0.0055				
D22S1045	13,16	13,16	13: 0.0069	16: 0.3823			

Locus	A	B	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
CSF1PO	10,10	10,10	10: 0.2202				
FGA	21,24	22,24	21: 0.1787	22: 0.2050			
			24: 0.1343				
PentaD	10,13	11,13	10: 0.1150	11: 0.1260			
			13: 0.1967				
PentaE	15,16	13,14	13: 0.0859	14: 0.0623			
			15: 0.0429	16: 0.0512			
SE33	15,22.2	15,21	15: 0.0402	21: 0.0249			
			22.2: 0.0374				
TH01	7,8	7,9.3	7: 0.1939	8: 0.0956			
			9.3: 0.3449				
TPOX	8,8	8,11	8: 0.5249	11: 0.2521			
vWA	18,18	16,18	16: 0.2008	18: 0.2022			

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

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

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

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

Part IV: ADDITIONAL COMMENTS

Comments regarding any part of this Test.

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

RELEASE OF DATA TO ACCREDITATION BODIES

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

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

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

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

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

ANAB Certificate No.

A2LA Certificate No.

Step 2: Complete the Laboratory Identifying Information in its entirety

Authorized Contact Person and Title

Laboratory Name

Location (City/State)