



DNA Parentage

Test No. 22-5872/7 Summary Report

Each participant received a sample pack consisting of four blood samples representing a paternity case. Samples were collected from a mother, a daughter, and two potential fathers. Participants were requested to analyze the samples using their existing protocols. The test also included a paper kinship exercise where participants were requested to evaluate the provided DNA profiles and determine if a half sibling relationship was supported. Data were returned from 93 participants and are compiled into the following tables:

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

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

Manufacturer's Information

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

SAMPLE PREPARATION: All stains were prepared from human whole blood which was drawn into EDTA tubes. Item 1 was blood from a female (mother) donor, Item 2 was blood from a female (daughter) donor, Item 3 was blood from a male donor who was the biological father of the Item 2 female, and Item 4 was blood from a male donor who was not the biological father of the Item 2 female. Each FTA card was spotted with 75uL of blood, while each swab (two swabs per item) was spotted with 100uL of blood. The different items were prepared at separate times and were packaged once they were thoroughly dried. Completed sample sets were stored at -20°C until shipment on August 22, 2022.

SAMPLE SET ASSEMBLY: For each sample set, all four Items (1-4) in their separate envelopes were placed in a pre-labeled sample pack envelope and sealed. The sample pack 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 half sibling relationship.

VERIFICATION: Laboratories that conducted predistribution analysis of the samples reported consistent results and associations.

Key to Test Substrates

5872 - FTA™ Micro Cards

5877 - Swabs

Amelogenin and STR Results

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

Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	
1	14,17.3	17,24	14,14	15,15	11,12	11,12
	10,11	13,15	13,16	15,21	13,13	11,12
	14,15	14,15	29,29	15,15	X,X	10,12
	22,2,26	11,14	5,12	15,19	6,8	8,8
	16,19	NM	NM	NM	NM	
2	15,17.3	17,20	10,14	15,19	11,12	12,20
	11,11	13,13	15,16	15,21	8,13	11,12
	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19	NM	NM	NM	NM	
3	15,15	20,22	9,10	15,19	12,12	17,20
	11,11	13,15	15,15	20,21	8,8	11,14
	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	9,12	12,16	14,19.2	7,7	8,11
	17,17	10	17	18	2	
4	14,15	20,22	11,11	15,17	11,13	12,19
	8,12	15,15	13,14	17,19	12,14	11,11
	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2,2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17	2	

YSTR Results

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

Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
3	35,37	15	11,14	14	30	24	10	13	13
	15	12	12	20	29	15	17	10	24
	38	12	13	17	18	22	23	10	11
4	39,40	16	18,18	13	30	21	10	11	15
	14	11	12	21	31	16	16	10	24
	39	11	11	18	17	22	21	14	11

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

Paternity Indices

Mode 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					

4PI - Grand Mean \pm 3STD Range**

1.53-5.17	1.13-8.34	0-0.0036	0-0.0115	0.465-1.17	0-0.0209
0-0.00275	0-0.00466	0-0.00371	0-0.00347	0-0.00258	1.28-2.44
0-0.00401	0.900-3.44	0-0.00236	0-0.0052	-	0-0.00363
0-0.00593	1.58-4.23	0-0.0124	0-0.0442	0-4.19	0-0.00042
1.00-3.32					

3PI - NIST STRBASE

6.68	3.19	2.38	30.1	1.34	*
4.88	1.52	5.08	3.11	8.30	0.795
4.06	2.77	3.54	13.4	-	1.39
8.11	2.26	9.77	119	5.16	1.98
3.52					

3PI - Grand Mean \pm 3STD Range**

3.96-9.14	0-7.37	0-6.90	0-75.1	0.711-2.16	6.45-21.1
2.63-6.39	0.829-2.41	3.76-6.09	0.406-6.05	2.42-15.0	0.513-1.18
2.08-5.74	1.98-3.88	2.37-5.10	2.71-21.3	-	1.07-1.78
1.59-16.5	1.49-2.98	5.06-13.8	0-341	1.59-8.02	0-6.27
1.20-6.30					

* 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

The 22-5872/7 DNA Parentage 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 blood from a female (mother) donor, Item 2 was blood from a female (daughter) donor, Item 3 was blood from a male donor who was the biological father of the Item 2 female, and Item 4 was blood from a male donor who was not the biological father of the Item 2 female. Participants were requested to analyze the samples and provide allelic and statistical results as well as relationship conclusions. The test also included a paper kinship exercise where participants were requested to evaluate the provided DNA profiles and report the kinship index and relationship conclusions (Refer to the Manufacturer's Information for preparation details).

DNA Analysis:

All 93 participants who returned data, reported STR results for all four items. For Item 1, all participants reported consistent data.

For Items 2, 3, and 4, at least one participant reported an inconsistent result for one or more loci.

For YSTR results, all participants reported consistent data for Items 3 and 4.

Paternity DNA Statistics:

All participants reported that the source of Item 3 could not be excluded as the biological father of Item 2. Of the participants that reported probability of paternity values, all reported 99.99% or higher. The most frequently reported population database was NIST-STRBASE.

Kinship DNA Statistics:

There were 43 participants who responded for the paper kinship exercise. For the loci likelihood ratio (LR) data, seven participants reported values that differed from the consensus, five of which reported differing values at multiple loci.

Of the 43 participants, 34 (~79%) reported a combined Kinship Index (KI) between 2.49 and 2.535. A consensus was not achieved for the question regarding whether the relationship was supported. Seventeen participants reported that the claim of a half sibling relationship was supported, four participants did not support the relationship claim, and twenty-two reported "Inconclusive."

STR Amplification Kit(s) & Results

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	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

33G37G-5872 GlobalFiler™ Express

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X,X	10,12
	22.2,26			15,19	6,8	8
	16,19	NM			NM	

39LYUM-5872 PowerPlex® Fusion 6C, GlobalFiler™, NGM SElect

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					

3ECBR6-5877 GlobalFiler™

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					

3F8R7M-5877 PowerPlex® 21

	14,17.3	17,24		15	11,12	11,12
	10,11	13,15		15,21	13	11,12
1	14,15	14,15	29		X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					

3FRDYD-5877 PowerPlex® Fusion 6C

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					

3LW7VU-5872 GlobalFiler™

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					

TABLE 1

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

Item 1 - STR Results

3M2YKL-5877	PowerPlex® Fusion 6C, GlobalFiler™ Express					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					
3PVM4G-5877	GlobalFiler™					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					
63UDXK-5872	GlobalFiler™ Express					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					
6CHZCV-5872	PowerPlex® 21 (Kinship)					
	14,17.3	17,24		15,15	11,12	11,12
	10,11	13,15		15,21	13,13	11,12
1	14,15	14,15	29,29		X,X	10,12
	22.2,26	11,14	5,12		6,8	8,8
	16,19					
73W8G7-5872	PowerPlex® Fusion 6C					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					
77PJU3-5877	GlobalFiler™					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

786NQE-5872 PowerPlex® Fusion, PP21, ESX17, CS7, Verifiler

	14,17.3	17,24	14	15	11,12	11,12
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					

7DPWQ-5872 GlobalFiler™

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					

7F4KV8-5872 Identifiler®, NGMSelect

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					

7PKXQF-5872 GlobalFiler™ Express

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X,X	10,12
	22.2,26			15,19	6,8	8
	16,19	NM			NM	

84E29B-5872 GlobalFiler™ Express

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X,X	10,12
	22.2,26			15,19	6,8	8
	16,19	NM			NM	

8D3UK9-5877 PowerPlex® Fusion 6C

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

8MBE64-5872 Investigator ESSPlex SE plus

	14,17.3	17,24	14,14	15,15		
		13,15	13,16	15,21		11,12
1	14,15	14,15	29,29	15,15	X,X	
	22.2,26			15,19	6,8	
	16,19					

9HTLAG-5877 Verifiler Plus (GeneMapper ID-X v.1.5)

	14,17.3	17,24	14	15	11,12	11,12
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X,X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19				-	

9P9DFV-5877 PowerPlex® FUSION 5C

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12		6,8	8,8
	16,19					

9QBQKP-5872 PowerPlex® Fusion 6C

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8,8
	16,19					

AFLNDE-5877 PowerPlex® 5C

	14,17.3	17,24	14	15	11,12	--
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	--	6,8	8
	16,19	--	--	--	--	

AJHDUL-5877 PowerPlex® Fusion 6C

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8,8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

ARWY24-5872	GlobalFiler™					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					
ATTEFL-5877	Identifiler®					
		17,24		15	11,12	
	10,11	13,15			13	11,12
1	14,15	14,15	29		X,X	10,12
	22.2,26				6,8	8
	16,19					
BQVKU2-5877	GlobalFiler™, MiniFiler					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19	No result			No result	
BQZZ9N-5872	GlobalFiler™ express					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19	NR			NR	
C8ZC9C-5877	PowerPlex® Fusion 6C					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					
CV64QA-5872	PowerPlex® Fusion, GlobalFiler™					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8,8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

DTFCVH-5877 PowerPlex® Fusion (Gene Analysen)

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29		X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					

DUAZED-5877 Fusion 6C

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					

EAH9U8-5872 Verifiler

	14,17.3	17,24	14,14	15,15	11,12	11,12
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12		6,8	8,8
	16,19					

EBAAT4-5877 GlobalFiler™

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X,X	10,12
	22.2,26			15,19	6,8	8
	16,19					

ENJRPD-5877 GlobalFiler™

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19	No Results			No Results	

ERKVGZ-5872 GlobalFiler™

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19	Not detected			Not detected	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

F87XDU-5872	PowerPlex® Fusion 6C					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8,8
	16,19					
FDVD22-5872	PowerPlex® Fusion					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					
FDX37Y-5877	GlobalFiler™					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19	no results			no results	
G48YJG-5872	PowerPlex® Fusion 6C					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8,8
	16,19					
GDT3MA-5872	PowerPlex® Fusion 6C					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X,X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19	-	-	-		
GU22R8-5877	Identifiler® Plus					
		17,24		15,15	11,12	
	10,11	13,15			13,13	11,12
1	14,15	14,15	29,29		X,X	10,12
	22.2,26				6,8	8,8
	16,19					

TABLE 1

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

Item 1 - STR Results

GW36G9-5872 GlobalFiler™						
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19	/			/	
H9TEJ8-5872 GlobalFiler™ Express						
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19	0			0	
HFE6AA-5872 GlobalFiler™						
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					
HWYZF6-5877 GlobalFiler™ IQC						
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					
J2C32Z-5872 PowerPlex® Fusion 5C						
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19	Inconclusive				
JHJYKY-5877 GlobalFiler™						
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X,X	10,12
	22.2,26			15,19	6,8	8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

JLGFXT-5877	GlobalFiler™					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19	no results			no results	
K4UEK3-5872	PowerPlex® FUSION 6C (MFYSIS)					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8,8
	16,19					
K8WKWM-5872	PowerPlex® Fusion					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					
K9R2B7-5872	PowerPlex® Fusion					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19	NR				
KFPQWF-5872	GlobalFiler™					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					
KKHW9X-5872	PowerPlex® Fusion 5C					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12		6,8	8,8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

L2XMK2-5872	Identifiler®					
		17,24		15,15	11,12	
		10,11	13,15		13,13	11,12
1		14,15	14,15	29,29	X,X	10,12
		22.2,26			6,8	8,8
		16,19				
NBJ97Q-5872	PowerPlex® Fusion 5C					
		14,17.3	17,24	14,14	15,15	11,12
		10,11	13,15	13,16	15,21	13,13
1		14,15	14,15	29,29	15,15	X,X
		22.2,26	11,14	5,12	6,8	8,8
		16,19				
NQDVAV-5872	GlobalFiler™ Express					
		14,17.3	17,24	14	15	11,12
		10,11	13,15	13,16	15,21	13
1		14,15	14,15	29	15	X,X
		22.2,26	-	-	15,19	6,8
		16,19	NM	-	-	NM
P2R7J9-5872	PowerPlex® Fusion 6C					
		14,17.3	17,24	14,14	15,15	11,12
		10,11	13,15	13,16	15,21	13,13
1		14,15	14,15	29,29	15,15	X,X
		22.2,26	11,14	5,12	15,19	6,8
		16,19				8,8
P99QKY-5872						
		14,17.3	17,24	14,14	15,15	11,12
		10,11	13,15	13,16	15,21	13,13
1		14,15	14,15	29,29	15,15	X,X
		22.2,26			15,19	6,8
		16,19				8,8
PMBG2X-5877	GlobalFiler™					
		14,17.3	17,24	14	15	11,12
		10,11	13,15	13,16	15,21	13
1		14,15	14,15	29	15	X
		22.2,26	Not Tested	Not Tested	15,19	6,8
		16,19	No Results	Not Tested	Not Tested	No Results

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

PMD6KW-5872 GlobalFiler™ Express

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					

PTVD6M-5872 GlobalFiler™

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					

PTX3AK-5877 GlobalFiler™

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					

PU94VJ-5877 GlobalFiler™

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					

QHBLZA-5872 PowerPlex®

	14,17.3	17,24		15,15	11,12	11,12
	10,11	13,15		15,21	13,13	11,12
1	14,15	14,15	29,29		X,X	10,12
	22.2,26	11,14	5,12		6,8	8,8
	16,19					

QV46G2-5872 GlobalFiler™

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

QZUGCW-5872 PowerPlex® Fusion

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19	NR				

R3EPWH-5872 PowerPlex® Fusion 6C

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					

RBTEVQ-5877 GlobalFiler™

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19	F			F	

RKEH3P-5872 PowerPlex® Fusion

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					

TFFNHU-5872 PowerPlex® Fusion 5C

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					

TNRV34-5872 GlobalFiler™

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

TYCCNJ-5877	GlobalFiler™					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19	No Results			No Results	
TZ8R32-5872	GlobalFiler™					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					
UALBVW-5877	PowerPlex® 21					
	14,17.3	17,24		15	11,12	11,12
	10,11	13,15		15,21	13	11,12
1	14,15	14,15	29		X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					
URUYR6-5872	PowerPlex® 21					
	14,17.3	17,24		15,15	11,12	11,12
	10,11	13,15		15,21	13,13	11,12
1	14,15	14,15	29,29		X,X	10,12
	22.2,26	11,14	5,12		6,8	8,8
	16,19					
UZLJPQ-5872	PowerPlex® FUSION, PowerPlex ESX17, CS7 and Verifiler Plus (FAMILIAS VERSION 3.2.1)					
	14,17.3	17,24	14	15	11,12	11,12
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					
V2BAAV-5877	ForenSeq Signature Prep - Primer Set B					
	14,17.3	17,24	14	15	11,12	11,12
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15,*	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19	NR	NR	NR		

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

W2RKQF-5872 GlobalFiler™

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					

W7GZEM-5872 GlobalFiler™ Express

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X,X	10,12
	22.2,26			15,19	6,8	8
	16,19	NM			NM	

W7KMRU-5877 GlobalFiler™

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19	NR			NR	

WAKXNU-5877 GlobalFiler™

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					

WRGJ6E-5872 GlobalFiler™

	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					

WYXW8K-5872 PowerPlex® Fusion 5C

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

XQMVLJ-5872 PowerPlex® Fusion

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					

XWQWMD-5872 PowerPlex® Fusion 5C

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					

XWTLQB-5872 PowerPlex® Fusion 5C

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12		6,8	8
	16,19					

XZQ8HD-5872 PowerPlex® Fusion 6C

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26	11,14	5,12	15,19	6,8	8
	16,19					

YA99BR-5872 GlobalFiler™ Express (Familias)

	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					

YGVRZ2-5872 PowerPlex® 21

	14,17.3	17,24		15,15	11,12	11,12
	10,11	13,15		15,21	13,13	11,12
1	14,15	14,15	29,29		X,X	10,12
	22.2,26	11,14	5,12		6,8	8,8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

ZEKBY9-5877	GlobalFiler™					
	14,17.3	17,24	14	15	11,12	
	10,11	13,15	13,16	15,21	13	11,12
1	14,15	14,15	29	15	X	10,12
	22.2,26			15,19	6,8	8
	16,19					
ZFX3RQ-5872	PowerPlex® fusion					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26	11,14	5,12		6,8	8,8
	16,19					
ZZEH7B-5872	GlobalFiler™					
	14,17.3	17,24	14,14	15,15	11,12	
	10,11	13,15	13,16	15,21	13,13	11,12
1	14,15	14,15	29,29	15,15	X,X	10,12
	22.2,26			15,19	6,8	8,8
	16,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

33G37G-5872 GlobalFiler™ Express

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X,X	12
	20,26			19,19.2	7,8	8,11
	17,19	NM			NM	

39LYUM-5872 PowerPlex® Fusion 6C, GlobalFiler™, NGM SElect

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

3ECCR6-5877 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					

3F8R7M-5877 PowerPlex® 21

	15,17.3	17,20		15,19	11,12	12,20
	11	13		15,21	8,13	11,12
2	13,15	14	29,30		X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					

3FRDYD-5877 PowerPlex® Fusion 6C

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

3LW7VU-5872 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

3M2YKL-5877	PowerPlex® Fusion 6C					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					
3PVM4G-5877	GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					
63UDXK-5872	GlobalFiler™ Express					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					
6CHZCV-5872	PowerPlex® 21 (Kinship)					
	15,17.3	17,20		15,19	11,12	12,20
	11,11	13,13		15,21	8,13	11,12
2	13,15	14,14	29,30		X,X	12,12
	20,26	9,11	5,16		7,8	8,11
	17,19					
73W8G7-5872	PowerPlex® Fusion 6C					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					
77PJU3-5877	GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

786NQE-5872 PowerPlex® Fusion, PP21, ESX17, CS7, Verifiler

	15,17.3	17,20	10,14	15,19	11,12	12,20
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

7DPWQ-5872 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					

7F4KV8-5872 Identifiler®, NGMSelect

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					

7PKXQF-5872 GlobalFiler™ Express

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X,X	12
	20,26			19,19.2	7,8	8,11
	17,19	NM			NM	

84E29B-5872 GlobalFiler™ Express

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X,X	12
	20,26			19,19.2	7,8	8,11
	17,19	NM			NM	

8D3UK9-5877 PowerPlex® Fusion 6C

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

TABLE 1

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

Item 2 - STR Results

8MBE64-5872 Investigator ESSPlex SE plus

	15,17.3	17,20	10,14	15,19		
		13,13	15,16	15,21		11,12
2	13,15	14,14	29,30	15,17	X,X	
	20,26			19,19.2	7,8	
	17,19					

9HTLAG-5877 Verifiler Plus (GeneMapper ID-X v.1.5)

	15,17.3	17,20	10,14	15,19	11,12	12,20
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X,X	12
	20,26	9,11	5,16		7,8	8,11
	17,19				-	

9P9DFV-5877 PowerPlex® FUSION 5C

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16		7,8	8,11
	17,19					

9QBQKP-5872 PowerPlex® Fusion 6C

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

AFLNDE-5877 PowerPlex® 5C

	15,17.3	17,20	10,14	15,19	11,12	--
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	--	7,8	8,11
	17,19		--	--	--	

AJHDUL-5877 PowerPlex® Fusion6C

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

ARWY24-5872	GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					
ATTEFL-5877	Identifiler®					
		17,20		15,19	11,12	
	11	13			8,13	11,12
2	13,15	14	29,30		X,X	12
	20,26				7,8	8,11
	17,19					
BQVKU2-5877	GlobalFiler™, MiniFiler					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19	No result			No result	
BQZZ9N-5872	GlobalFiler™ express					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19	NR			NR	
C8ZC9C-5877	PowerPlex® Fusion 6C					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					
CV64QA-5872	PowerPlex® Fusion, GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

DTFCVH-5877 PowerPlex® Fusion (Gene Analysen)

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30		X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					

DUAZED-5877 Fusion 6C

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

EAH9U8-5872 Verifiler

	15,17.3	17,20	10,14	15,19	11,12	12,20
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16		7,8	8,11
	17,19					

EBAAT4-5877 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X,X	12
	20,26			19,19.2	7,8	8,11
	17,19					

ENJRPD-5877 GlobalFiler™

	15,17.3	{17,20}	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19	No Results			No Results	

ERKVGZ-5872 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19	Not detected			Not detected	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

F87XDU-5872	PowerPlex® Fusion 6C					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					
FDVD22-5872	PowerPlex® Fusion					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					
FDX37Y-5877	GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19	no results			no results	
G48YJG-5872	PowerPlex® Fusion 6C					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					
GDT3MA-5872	PowerPlex® Fusion 6C					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X,X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19	-	-	-		
GU22R8-5877	Identifiler® Plus					
		17,20		15,19	11,12	
	11,11	13,13			8,13	11,12
2	13,15	14,14	29,30		X,X	12,12
	20,26				7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

GW36G9-5872 GlobalFiler™						
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19	/	/	/	/	
H9TEJ8-5872 GlobalFiler™ Express						
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19	0			0	
HFE6AA-5872 GlobalFiler™						
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					
HWYZF6-5877 GlobalFiler™ IQC						
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					
J2C32Z-5872 PowerPlex® Fusion 5C						
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19	Inconclusive				
JHJYKY-5877 GlobalFiler™						
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X,X	12
	20,26			19,19.2	7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

JLGFXT-5877	GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19	no results			no results	
K4UEK3-5872	PowerPlex® FUSION 6C (MFYSIS)					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					
K8WKWM-5872	PowerPlex® Fusion					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					
K9R2B7-5872	PowerPlex® Fusion					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19	NR				
KFPQWF-5872						
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					
KKHW9X-5872	PowerPlex® Fusion 5C					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16		7,8	8,11
	17,19					

TABLE 1

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

Item 2 - STR Results

L2XMK2-5872	Identifiler®					
		17,20		15,19	11,12	
		11,11	13,13		8,13	11,12
2		13,15	14,14	29,30	X,X	12,12
		20,26			7,8	8,11
		17,19				
NBJ97Q-5872	PowerPlex® Fusion 5C					
		17,20	10,14	15,19	11,12	
		11,11	13,13	15,16	8,13	11,12
2		13,15	14,14	29,30	X,X	12,12
		20,26	9,11	5,16	7,8	8,11
		17,19				
NQDVAV-5872	GlobalFiler™ Express					
		17,20	10,14	15,19	11,12	-
		11	13,13	15,16	8,13	11,12
2		13,15	14	29,30	X,X	12
		20,26	-	19,19.2	7,8	8,11
		17,19	NM	-	NM	
P2R7J9-5872	PowerPlex® Fusion 6C					
		17,20	10,14	15,19	11,12	
		11,11	13,13	15,16	8,13	11,12
2		13,15	14,14	29,30	X,X	12,12
		20,26	9,11	5,16	7,8	8,11
		17,19		19,19.2		
P99QKY-5872						
		17,20	10,14	15,19	11,12	
		11,11	13,13	15,16	8,13	11,12
2		13,15	14,14	29,30	X,X	12,12
		20,26		19,19.2	7,8	8,11
		17,19				
PMBG2X-5877	GlobalFiler™					
		17,20	10,14	15,19	11,12	Not Tested
		11	13,13	15,16	8,13	11,12
2		13,15	14	29,30	X	12
		20,26	Not Tested	19,19.2	7,8	8,11
		17,19	No Results	Not Tested	No Results	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

PMD6KW-5872 GlobalFiler™ Express

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					

PTVD6M-5872 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					

PTX3AK-5877 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					

PU94VJ-5877 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					

QHBLZA-5872 PowerPlex®

	15,17.3	17,20		15,19	11,12	12,20
	11,11	13,13		15,21	8,13	11,12
2	13,15	14,14	29,30		X,X	12,12
	20,26	9,11	5,16		7,8	8,11
	17,19					

QV46G2-5872 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

QZUGCW-5872 PowerPlex® Fusion

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19	NR				

R3EPWH-5872 PowerPlex® Fusion 6C

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

RBTEVQ-5877 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19	F			F	

RKEH3P-5872 PowerPlex® Fusion

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					

TFFNHU-5872 PowerPlex® Fusion 5C

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					

TNRV34-5872 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

TYCCNJ-5877	GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19	No Results			No Results	
TZ8R32-5872	GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					
UALBVW-5877	PowerPlex® 21					
	15,17.3	17,20		15,19	11,12	12,20
	11	13		15,21	8,13	11,12
2	13,15	14	29,30		X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					
URUYR6-5872	PowerPlex® 21					
	15,17.3	17,20		15,19	11,12	12,20
	11,11	13,13		15,21	8,13	11,12
2	13,15	14,14	29,30		X,X	12,12
	20,26	9,11	5,16		7,8	8,11
	17,19					
UZLJPQ-5872	PowerPlex® FUSION, PowerPlex ESX17, CS7 and Verifiler Plus (FAMILIAS 3.2.1)					
	15,17.3	17,20	10,14	15,19	11,12	12,20
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					
V2BAAV-5877	ForenSeq Signature Prep - Primer Set B					
	15,17.3	17,20	10,14	15,19	11,12	12,20
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19	NR	NR	18		

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

W2RKQF-5872 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					

W7GZEM-5872 GlobalFiler™ Express

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X,X	12
	20,26			19,19.2	7,8	8,11
	17,19	NM			NM	

W7KMRU-5877 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19	NR			NR	

WAKXNU-5877 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					

WRGJ6E-5872 GlobalFiler™

	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					

WYXW8K-5872 PowerPlex® Fusion 5C

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

XQMVLJ-5872 PowerPlex® Fusion

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					

XWQWMD-5872 PowerPlex® Fusion 5C

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					

XWTLQB-5872 PowerPlex® Fusion 5C

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16		7,8	8,11
	17,19					

XZQ8HD-5872 PowerPlex® Fusion 6C

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26	9,11	5,16	19,19.2	7,8	8,11
	17,19					

YA99BR-5872 GlobalFiler™ Express (Familias)

	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					

YGVRZ2-5872 PowerPlex® 21

	15,17.3	17,20		15,19	11,12	12,20
	11,11	13,13		15,21	8,13	11,12
2	13,15	14,14	29,30		X,X	12,12
	20,26	9,11	5,16		7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

ZEKBY9-5877	GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11	13	15,16	15,21	8,13	11,12
2	13,15	14	29,30	15,17	X	12
	20,26			19,19.2	7,8	8,11
	17,19					
ZFX3RQ-5872	PowerPlex® fusion					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26	9,11	5,16		7,8	8,11
	17,19					
ZZEH7B-5872	GlobalFiler™					
	15,17.3	17,20	10,14	15,19	11,12	
	11,11	13,13	15,16	15,21	8,13	11,12
2	13,15	14,14	29,30	15,17	X,X	12,12
	20,26			19,19.2	7,8	8,11
	17,19					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

33G37G-5872	GlobalFiler™ Express					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
39LYUM-5872	PowerPlex® Fusion 6C, GlobalFiler™, NGM Select					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10	17	18	2	
3ECBR6-5877	GlobalFiler™					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
3F8R7M-5877	PowerPlex® 21					
	15	20,22		15,19	12	17,20
	11	13,15		20,21	8	11,14
3	13,14	14	30		X,Y	12,13
	20	9,12	12,16		7	8,11
	17					
3FRDYD-5877	PowerPlex® Fusion 6C					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10	17	18		
3LW7VU-5872	GlobalFiler™ (ForeStatistics)					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

3M2YKL-5877	PowerPlex® Fusion 6C					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10	17	18		
3PVM4G-5877	GlobalFiler™					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
63UDXK-5872	GlobalFiler™ Express					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
6CHZCV-5872	PowerPlex® 21 (Kinship)					
	15,15	20,22		15,19	12,12	17,20
	11,11	13,15		20,21	8,8	11,14
3	13,14	14,14	30,30		X,Y	12,13
	20,20	9,12	12,16		7,7	8,11
	17,17					
73W8G7-5872	PowerPlex® Fusion 6C					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10	17	18		
77PJU3-5877	GlobalFiler™					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

786NQE-5872 PowerPlex® Fusion, PP21, ESX17, CS7, Y23, Verifiler (Familias and PAT-PCR)

	15	20,22	9,10	15,19	12	17,20
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10				

7DPWQ-5872 GlobalFiler™

	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	

7F4KV8-5872 Identifiler®, NGMSelect

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17					

7PKXQF-5872 GlobalFiler™ Express

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	

84E29B-5872 GlobalFiler™ Express

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	

8D3UK9-5877 PowerPlex® Fusion 6C

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10	17	18		

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

8MBE64-5872	Investigator ESSPlex SE plus					
	15,15	20,22	9,10	15,19		
		13,15	15,15	20,21		11,14
3	13,14	14,14	30,30	17,17	X,Y	
	20,20			14,19.2	7,7	
	17,17					
9HTLAG-5877	Verifiler Plus (GeneMapper ID-X v.1.5)					
	15	20,22	9,10	15,19	12	17,20
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17				2	
9P9DFV-5877	PowerPlex® FUSION 5C (GENOPROOF V. 3)					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	9,12	12,16		7,7	8,11
	17,17	10				
9QBQKP-5872	PowerPlex® Fusion 6C					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	9,12	12,16	14,19.2	7,7	8,11
	17,17	10	17	18		
AFLNDE-5877	PowerPlex® 5C					
	15	20,22	9,10	15,19	12	--
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	--	7	8,11
	17	10	--	--	--	
AJHDUL-5877	PowerPlex® Fusion6C (Familias v3.3)					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	9,12	12,16	14,19.2	7,7	8,11
	17,17	10	17	18		

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

ARWY24-5872	GlobalFiler™					
		15	20,22	9,10	15,19	12
		11	13,15	15	20,21	8
3		13,14	14	30	17	X,Y
		20			14,19.2	7
		17	10			2
ATTEFL-5877	Identifiler®					
			20,22		15,19	12
		11	13,15			8
3		13,14	14	30		X,Y
		20				7
		17				
BQVKU2-5877	GlobalFiler™, MiniFiler					
		15,15	20,22	9,10	15,19	12,12
		11,11	13,15	15,15	20,21	8,8
3		13,14	14,14	30,30	17,17	X,Y
		20,20			14,19.2	7,7
		17,17	10			2
BQZZ9N-5872	GlobalFiler™ express					
		15	20,22	9,10	15,19	12
		11	13,15	15	20,21	8
3		13,14	14	30	17	X,Y
		20			14,19.2	7
		17	10			2
C8ZC9C-5877	PowerPlex® Fusion 6C					
		15	20,22	9,10	15,19	12
		11	13,15	15	20,21	8
3		13,14	14	30	17	X,Y
		20	9,12	12,16	14,19.2	7
		17	10	17	18	
CV64QA-5872	PowerPlex® Fusion, GlobalFiler™					
		15,15	20,22	9,10	15,19	12,12
		11,11	13,15	15,15	20,21	8,8
3		13,14	14,14	30,30	17,17	X,Y
		20,20	9,12	12,16	14,19.2	7,7
		17,17	10			2

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

DTFCVH-5877	PowerPlex® Fusion (Gene Analysen)					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30		X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				
DUAZED-5877	GlobalFiler™					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
EAH9U8-5872	Verifiler					
	15,15	20,22	9,10	15,19	12,12	17,20
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	9,12	12,16		7,7	8,11
	17,17				2	
EBAAT4-5877	GlobalFiler™					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,29.2	7	8,11
	17	10			2	
ENJRPD-5877	GlobalFiler™					
	15	{20,22}	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
ERKVGZ-5872	GlobalFiler™					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

F87XDU-5872	PowerPlex® Fusion 6C					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	9,12	12,16	14,19.2	7,7	8,11
	17,17	10	17	18		
FDVD22-5872	PowerPlex® Fusion					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				
FDX37Y-5877	GlobalFiler™					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
G48YJG-5872	PowerPlex® Fusion 6C					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	9,12	12,16	14,19.2	7,7	8,11
	17,17	10	17	18		
GDT3MA-5872	PowerPlex® Fusion 6C					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10	17	18		
GU22R8-5877	Identifiler® Plus					
		20,22		15,19	12,12	
	11,11	13,15			8,8	11,14
3	13,14	14,14	30,30		X,Y	12,13
	20,20				7,7	8,11
	17,17					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

GW36G9-5872 GlobalFiler™						
	15,15	20,22	9,10	15,19	12,12	/
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	/	/	14,19.2	7,7	8,11
	17,17	10	/	/	2	
H9TEJ8-5872 GlobalFiler™ Express						
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
HFE6AA-5872 GlobalFiler™						
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
HWYZF6-5877 GlobalFiler™ IQC						
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
J2C32Z-5872 PowerPlex® Fusion 5C						
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	Inconclusive				
JHJYKY-5877 GlobalFiler™						
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

JLGFXT-5877	GlobalFiler™					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
K4UEK3-5872	PowerPlex® FUSION 6C (MFYSIS)					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	9,12	12,16	14,19.2	7,7	8,11
	17,17	10	17	18		
K8WKWM-5872	PowerPlex® Fusion					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				
K9R2B7-5872	PowerPlex® Fusion					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				
KFPQWF-5872	GlobalFiler™					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
KKHW9X-5872	PowerPlex® Fusion 5C					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20	9,12	12,16		7,7	8,11
	17,17	10				

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

L2XMK2-5872	Identifiler®					
		20,22		15,19	12,12	
		11,11	13,15		8,8	11,14
3		13,14	14,14	30,30	X,Y	12,13
		20,20			7,7	8,11
		17,17				
NBJ97Q-5872	PowerPlex® Fusion 5C					
		20,22	9,10	15,19	12,12	
		11,11	13,15	15,15	20,21	8,8
3		13,14	14,14	30,30	17,17	X,Y
		20,20	9,12	12,16	7,7	8,11
		17,17	10			
NQDVAW-5872	GlobalFiler™ Express					
		20,22	9,10	15,19	12	-
		11	13,15	15	20,21	8
3		13,14	14	30	17	X,Y
		20	-	-	14,19.2	7
		17	10	-	2	8,11
P2R7J9-5872	PowerPlex® Fusion 6C					
		20,22	9,10	15,19	12,12	
		11,11	13,15	15,15	20,21	8,8
3		13,14	14,14	30,30	17,17	X,Y
		20,20	9,12	12,16	14,19.2	7,7
		17,17	10	17	18	8,11
P99QKY-5872						
		20,22	9,10	15,19	12,12	
		11,11	13,15	15,15	20,21	8,8
3		13,14	14,14	30,30	17,17	X,Y
		20,20		14,19.2	7,7	8,11
		17,17	10		2	
PMBG2X-5877	GlobalFiler™					
		20,22	9,10	15,19	12	Not Tested
		11	13,15	15	20,21	8
3		13,14	14	30	17	X,Y
		20	Not Tested	Not Tested	14,19.2	7
		17	10	Not Tested	Not Tested	2

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

PMD6KW-5872 GlobalFiler™ Express

	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	

PTVD6M-5872 GlobalFiler™

	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	

PTX3AK-5877 GlobalFiler™

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	

PU94VJ-5877 GlobalFiler™

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	

QHBLZA-5872 PowerPlex®

	15,15	20,22		15,19	12,12	17,20
	11,11	13,15		20,21	8,8	11,14
3	13,14	14,14	30,30		X,Y	12,13
	20,20	9,12	12,16		7,7	8,11
	17,17					

QV46G2-5872 GlobalFiler™

	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

QZUGCW-5872 PowerPlex® Fusion

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				

R3EPWH-5872 PowerPlex® Fusion 6C

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10	17	18		

RBTEVQ-5877 GlobalFiler™

	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	

RKEH3P-5872 PowerPlex® Fusion

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				

TFFNHU-5872 PowerPlex® Fusion 5C

	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				

TNRV34-5872 GlobalFiler™

	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

TYCCNJ-5877	GlobalFiler™					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
TZ8R32-5872	GlobalFiler™ (Forestatitics)					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
UALBVW-5877	PowerPlex® 21					
	15	20,22		15,19	12	17,20
	11	13,15		20,21	8	11,14
3	13,14	14	30		X,Y	12,13
	20	9,12	12,16		7	8,11
	17					
URUYR6-5872	PowerPlex® 21					
	15,15	20,22		15,19	12,12	17,20
	11,11	13,15		20,21	8,8	11,14
3	13,14	14,14	30,30		X,Y	12,13
	20,20	9,12	12,16		7,7	8,11
	17,17					
UZLJPQ-5872	PowerPlex® FUSION, PowerPlex ESX17, CS7 and Verifiler Plus (FAMILIAS 3.2.1)					
	15	20,22	9,10	15,19	12	17,20
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10	17	18		
V2BAAV-5877	ForenSeq Signature Prep - Primer Set B					
	15	20,22	9,10	15,19	12	17,20
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17,*	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10	17	18		

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

W2RKQF-5872 GlobalFiler™						
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
W7GZEM-5872 GlobalFiler™ Express						
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
W7KMRU-5877 GlobalFiler™						
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
WAKXNU-5877 GlobalFiler™						
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
WRGJ6E-5872 GlobalFiler™						
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	
WYXW8K-5872 PowerPlex® Fusion 5C						
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

XQMVLJ-5872	PowerPlex® Fusion					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				
XWQWMD-5872	PowerPlex® Fusion 5C					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				
XWTLQB-5872	PowerPlex® Fusion 5C					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16		7	8,11
	17	10				
XZQ8HD-5872	PowerPlex® Fusion 6C					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20	9,12	12,16	14,19.2	7	8,11
	17	10	17	18		
YA99BR-5872	GlobalFiler™ Express (Familias)					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
YGVRZ2-5872	PowerPlex® 21					
	15,15	20,22		15,19	12,12	17,20
	11,11	13,15		20,21	8,8	11,14
3	13,14	14,14	30,30		X,Y	12,13
	20,20	9,12	12,16		7,7	8,11
	17,17					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

ZEKBY9-5877	GlobalFiler™					
	15	20,22	9,10	15,19	12	
	11	13,15	15	20,21	8	11,14
3	13,14	14	30	17	X,Y	12,13
	20			14,19.2	7	8,11
	17	10			2	
ZFX3RQ-5872	PowerPlex® Fusion					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,X	12,13
	20,20	9,12	12,16		7,7	8,11
	17,17	10,10				
ZZEH7B-5872	GlobalFiler™					
	15,15	20,22	9,10	15,19	12,12	
	11,11	13,15	15,15	20,21	8,8	11,14
3	13,14	14,14	30,30	17,17	X,Y	12,13
	20,20			14,19.2	7,7	8,11
	17,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

33G37G-5872 GlobalFiler™ Express

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

39LYUM-5872 PowerPlex® Fusion 6C, GlobalFiler™, NGM Select

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17	2	

3ECBR6-5877 GlobalFiler™

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

3F8R7M-5877 PowerPlex® 21

	14,15	20,22		15,17	11,13	12,19
	8,12	15		17,19	12,14	11
4	15,20	12,14	29,30.2		X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17					

3FRDYD-5877 PowerPlex® Fusion 6C

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		

3LW7VU-5872 GlobalFiler™ (ForeStatistics)

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

3M2YKL-5877	PowerPlex® Fusion 6C					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
3PVM4G-5877	GlobalFiler™					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
63UDXK-5872	GlobalFiler™ Express					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
6CHZCV-5872	PowerPlex® 21 (Kinship)					
	14,15	20,22		15,17	11,13	12,19
	8,12	15,15		17,19	12,14	11,11
4	15,20	12,14	29,30.2		X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17					
73W8G7-5872	PowerPlex® Fusion 6C					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
77PJU3-5877	GlobalFiler™					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

786NQE-5872 PowerPlex® Fusion, PP21, ESX17, CS7, Y23, Verifiler

	14,15	20,22	11	15,17	11,13	12,19
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10				

7DPWQ-5872 GlobalFiler™

	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

7F4KV8-5872 Identifiler®, NGMSelect

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17					

7PKXQF-5872 GlobalFiler™ Express

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

84E29B-5872 GlobalFiler™ Express

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

8D3UK9-5877 PowerPlex® Fusion 6C

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

8MBE64-5872	Investigator ESSPlex SE plus					
	14,15	20,22	11,11	15,17		
		15,15	13,14	17,19		11,11
4	15,20	12,14	29,30.2	10,18	X,Y	
	22,23			16,18	7,9	
	15,17					
9HTLAG-5877	Verifiler Plus (GeneMapper ID-X v.1.5)					
	14,15	20,22	11	15,17	11,13	12,19
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17				2	
9P9DFV-5877	PowerPlex® FUSION 5C (GENOPROOF V. 3)					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				
9QBQKP-5872	PowerPlex® Fusion 6C					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
AFLNDE-5877	PowerPlex® 5C					
	14,15	20,22	11	15,17	11,13	--
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	--	7,9	8,9
	15,17	10	--	--	--	
AJHDUL-5877	PowerPlex® Fusion6C (Familias v3.3)					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

ARWY24-5872	GlobalFiler™					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
ATTEFL-5877	Identifiler®					
		20,22		15,17	11,13	
	8,12	15			12,14	11
4	15,20	12,14	29,30.2		X,Y	7,10
	22,23				7,9	8,9
	15,17					
BQVKU2-5877	GlobalFiler™, MiniFiler					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
BQZZ9N-5872	GlobalFiler™ express					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
C8ZC9C-5877	PowerPlex® Fusion 6C					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2,2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
CV64QA-5872	GlobalFiler™					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	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

DTFCVH-5877	PowerPlex® Fusion (Gene Analysen)					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2		X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				
DUAZED-5877	Fusion 6C					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
EAH9U8-5872	Verifiler					
	14,15	20,22	11,11	15,17	11,13	12,19
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17				2	
EBAAT4-5877	GlobalFiler™					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
ENJRPD-5877	GlobalFiler™					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
ERKVGZ-5872	GlobalFiler™					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

F87XDU-5872	PowerPlex® Fusion 6C					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
FDVD22-5872	PowerPlex® Fusion					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				
FDX37Y-5877	GlobalFiler™					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
G48YJG-5872	PowerPlex® Fusion 6C					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
GDT3MA-5872	PowerPlex® Fusion 6C					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
GU22R8-5877	Identifiler® Plus					
		20,22		15,17	11,13	
	8,12	15,15			12,14	11,11
4	15,20	12,14	29,30.2		X,Y	7,10
	22,23				7,9	8,9
	15,17					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	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

GW36G9-5872 GlobalFiler™						
	14,15	20,22	11,11	15,17	11,13	/
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	/	/	16,18	7,9	8,9
	15,17	10	/	/	2	
H9TEJ8-5872 GlobalFiler™ Express						
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
HFE6AA-5872 GlobalFiler™						
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
HWYZF6-5877 GlobalFiler™ IQC						
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
J2C32Z-5872 PowerPlex® Fusion 5C						
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2,2,9	13,15		7,9	8,9
	15,17	Inconclusive				
JHJYKY-5877 GlobalFiler™						
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

JLGFXT-5877	GlobalFiler™					
		14,15	20,22	11,11	15,17	11,13
		8,12	15,15	13,14	17,19	12,14
4		15,20	12,14	29,30.2	10,18	X,Y
		22,23			16,18	7,9
		15,17	10			2
K4UEK3-5872	PowerPlex® FUSION 6C					
		14,15	20,22	11,11	15,17	11,13
		8,12	15,15	13,14	17,19	12,14
4		15,20	12,14	29,30.2	10,18	X,Y
		22,23	2.2,9	13,15	16,18	7,9
		15,17	10	18	17	
K8WKWM-5872	PowerPlex® Fusion					
		14,15	20,22	11	15,17	11,13
		8,12	15	13,14	17,19	12,14
4		15,20	12,14	29,30.2	10,18	X,Y
		22,23	2.2,9	13,15		7,9
		15,17	10			
K9R2B7-5872	PowerPlex® Fusion					
		14,15	20,22	11	15,17	11,13
		8,12	15	13,14	17,19	12,14
4		15,20	12,14	29,30.2	10,18	X,Y
		22,23	2.2,9	13,15		7,9
		15,17	10			
KFPQWF-5872	GlobalFiler™					
		14,15	20,22	11,11	15,17	11,13
		8,12	15,15	13,14	17,19	12,14
4		15,20	12,14	29,30.2	10,18	X,Y
		22,23			16,18	7,9
		15,17	10			2
KKHW9X-5872	PowerPlex® Fusion 5C					
		14,15	20,22	11,11	15,17	11,13
		8,12	15,15	13,14	17,19	12,14
4		15,20	12,14	29,30.2	10,18	X,Y
		22,23	2.2,9	13,15		7,9
		15,17	10			

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	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

L2XMK2-5872	Identifiler®					
		20,22		15,17	11,13	
	8,12	15,15			12,14	11,11
4	15,20	12,14	29,30.2		X,Y	7,10
	22,23				7,9	8,9
	15,17					
NBJ97Q-5872	PowerPlex® Fusion 5C					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				
NQDVAV-5872	GlobalFiler™ Express					
	14,15	20,22	11	15,17	11,13	-
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	-	-	16,18	7,9	8,9
	15,17	10	-	-	2	
P2R7J9-5872	PowerPlex® Fusion 6C					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
P99QKY-5872						
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
PMBG2X-5877	GlobalFiler™					
	14,15	20,22	11	15,17	11,13	Not Tested
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	Not Tested	Not Tested	16,18	7,9	8,9
	15,17	10	Not Tested	Not Tested	2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	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

PMD6KW-5872 GlobalFiler™ Express

	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

PTVD6M-5872 GlobalFiler™

	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

PTX3AK-5877 GlobalFiler™

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

PU94VJ-5877 GlobalFiler™

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

QHBLZA-5872 PowerPlex®

	14,15	20,22		15,17	11,13	12,19
	8,12	15,15		17,19	12,14	11,11
4	15,20	12,14	29,30.2		X,Y	7,10
	22,23	2,2,9	13,15		7,9	8,9
	15,17					

QV46G2-5872 GlobalFiler™

	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

QZUGCW-5872 PowerPlex® Fusion

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				

R3EPWH-5872 PowerPlex® Fusion 6C

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		

RBTEVQ-5877 GlobalFiler™

	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

RKEH3P-5872 PowerPlex® Fusion

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				

TFFNHU-5872 PowerPlex® Fusion 5C

	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				

TNRV34-5872 GlobalFiler™

	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

TYCCNJ-5877	GlobalFiler™					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
TZ8R32-5872	GlobalFiler™					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
UALBVW-5877	PowerPlex® 21					
	14,15	20,22		15,17	11,13	12,19
	8,12	15		17,19	12,14	11
4	15,20	12,14	29,30.2			7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17					
URUYR6-5872	PowerPlex® 21					
	14,15	20,22		15,17	11,13	12,19
	8,12	15,15		17,19	12,14	11,11
4	15,20	12,14	29,30.2		X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17					
UZLJPQ-5872	PowerPlex® FUSION, PowerPlex ESX17, CS7 and Verifiler Plus					
	14,15	20,22	11	15,17	11,13	12,19
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
V2BAAV-5877	ForenSeq Signature Prep - Primer Set B					
	14,15	20,22	11	15,17	11,13	12,19
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10	18	17		

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

W2RKQF-5872 GlobalFiler™						
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
W7GZEM-5872 GlobalFiler™ Express						
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
W7KMRU-5877 GlobalFiler™						
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
WAKXNU-5877 GlobalFiler™						
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
WRGJ6E-5872 GlobalFiler™						
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
WYXW8K-5872 PowerPlex® Fusion 5C						
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

XQMVLJ-5872	PowerPlex® Fusion					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				
XWQWMD-5872	PowerPlex® Fusion 5C					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				
XWTLQB-5872	PowerPlex® Fusion 5C					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10				
XZQ8HD-5872	PowerPlex® Fusion 6C					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15	16,18	7,9	8,9
	15,17	10	18	17		
YA99BR-5872	GlobalFiler™ Express (Familias)					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
YGVRZ2-5872	PowerPlex® 21					
	14,15	20,22		15,17	11,13	12,19
	8,12	15,15		17,19	12,14	11,11
4	15,20	12,14	29,30.2		X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17					

TABLE 1

WebCode-Test	Amplification Kits (Probabilistic Genotyping)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	D7S820	D8S1179	D10S1248	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

ZEKBY9-5877	GlobalFiler™					
	14,15	20,22	11	15,17	11,13	
	8,12	15	13,14	17,19	12,14	11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	
ZFX3RQ-5872	PowerPlex® Fusion					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23	2.2,9	13,15		7,9	8,9
	15,17	10,10				
ZZEH7B-5872	GlobalFiler™					
	14,15	20,22	11,11	15,17	11,13	
	8,12	15,15	13,14	17,19	12,14	11,11
4	15,20	12,14	29,30.2	10,18	X,Y	7,10
	22,23			16,18	7,9	8,9
	15,17	10			2	

Paternity Index Results

TABLE 2

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

Item 3PI - Paternity Index Results

33G37G-5872 NIST-STRBASE						
	6.6844	3.1948	2.3752	30.1204	1.3444	
	4.8780	1.5169	5.0838	3.1113	8.2987	0.7951
3PI	4.0551	2.7662	3.5398	13.3689		1.3885
	8.1103			119.0476	5.1572	1.9833
	3.5223					
39LYUM-5872 Local Database						
	9.71	3.51	2.66	39.37	1.44	
	5.10	1.44	4.29	2.76	7.12	0.81
3PI	4.84	2.67	4.20	15.20		1.64
	7.57	1.96	12.85	68.49	7.55	1.97
	3.38					
3ECCR6-5877 FBI PopStats						
	6.6357	3.7994	1.1484	34.722	1.4075	
	3.4542	1.5480	4.0984	4.0193	13.928	0.82932
3PI	2.9851	3.2404	3.0960	16.722		1.2745
	14.409			41.667	2.9647	1.8335
3F8R7M-5877 Promega						
	6.6845	3.1949		30.1205	1.3444	15.6740
	4.8780	1.5170		3.1114	8.2988	0.7952
3PI	4.0552	2.7663	3.5398			1.3885
	8.1103	2.2563	9.7656		5.1573	1.9833
	3.5224					
3FRDYD-5877 FBI PopStats						
	6.6357	3.7994	1.1484	34.722	1.4075	
	3.4542	1.5480	4.0984	4.0193	13.928	0.82932
3PI	2.9851	3.2404	3.0960	16.722		1.2745
	14.409	2.5176	4.3554	41.667	2.9647	1.8335
	4.4464					
3LW7VU-5872 NIST-STRBASE						
		1.597345133	1.1875	15.95791032		
	4.878378378	1.516806723		1.940860215		0.795154185
3PI	2.028089888	2.766283525				1.388461538
				60.16666667		1.46801154
3M2YKL-5877 NIST-STRBASE						
	6.68	3.19	2.37	30.0	1.34	
	4.87	1.51	5.08		8.29	0.795
3PI	4.05	2.76	3.53	13.3		1.38
	8.11	2.25	9.75	72.2	5.15	1.98
	3.52					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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3PVM4G-5877	[Location Identifying Database]					
		3.42		50.00	1.34	
	5.54	1.54			8.21	0.80
3PI	4.11	2.93	3.97			1.52
	7.19				4.59	1.93
	4.08					
63UDXK-5872	FBI PopStats					
	6.9638	3.3670	2.7670	40.323	1.3160	
	4.9261	1.4961	5.7703	2.8852	9.8522	0.81446
3PI	4.2088	2.8653	4.2974	10.363		1.5305
	6.9638				5.7703	1.9608
	3.7411					
6CHZCV-5872	NIST-STRBASE					
	6.1843	3.7679		54.3478	1.4948	10.7991
	4.2463	1.8636		3.2982	10.3093	0.9119
3PI	4.7755	3.2884	4.0388			1.4510
	11.3250	2.3020	9.8619		3.3910	2.0392
	3.8153					
73W8G7-5872	FBI PopStats					
	6.68	3.20	2.38	30.1	1.34	
	4.88	1.52	5.08	3.11	8.30	0.795
3PI	4.06	2.77	3.54	13.4		1.39
	8.11	2.26	9.77	119	5.16	1.98
	3.52					
77PJU3-5877	FBI PopStats					
	6.6357	3.7994	1.1484	34.722	1.4075	
	3.4542	1.5480	4.0984	4.0193	13.928	0.82932
3PI	2.9851	3.2404	3.0960	16.722		1.2745
	14.409			41.667	2.9647	1.8335
786NQE-5872	NIST-STRBASE					
	6.68	3.19	2.38	30.12	1.34	15.67
	4.88	1.52	5.08	3.11	8.30	0.80
3PI	4.06	2.77	3.54	13.37		1.39
	8.11	2.26	9.77	119.05	5.16	1.98
	3.52					
7DPVWQ-5872	FBI PopStats, NIST 2017					
	6.68	3.19	2.37	30.1	1.34	
	4.87	1.51	5.08	3.11	8.29	0.795
3PI	4.05	2.76	3.53	13.3		1.38
	8.11				5.15	1.98

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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7F4KV8-5872	laboratory specific database					
	9,523810	3,521127	2,637131	41,666667	1,439885	
	5,102041	1,440922	4,255319	2,673797	7,132668	0,808146
3PI	4,854369	2,673797	5,434783	2,702703		1,636661
	7,575758			250,000000	7,518797	1,945525
	3,357958					
7PKXQF-5872	NIST-STRBASE					
	6.6844	3.1948	2.3752	30.1204	1.3444	
	4.8780	1.5169	5.0838	3.1113	8.2987	0.7951
3PI	4.0551	2.7662	3.5398	13.3689		1.3885
	8.1103			119.0476	5.1572	1.9833
	3.5223					
84E29B-5872	NIST-STRBASE					
	6.6844	3.1948	2.3752	30.1204	1.3444	
	4.8780	1.5169	5.0838	3.1113	8.2987	0.7951
3PI	4.0551	2.7662	3.5398	13.3689		1.3885
	8.1103			119.0476	5.1572	1.9833
	3.5223					
8D3UK9-5877	FBI PopStats					
	6.63	3.79	1.14	34.72	1.40	
	3.45	1.54	4.09	4.01	13.92	0.82
3PI	2.98	3.24	3.09	16.72		1.27
	14.40	2.51	4.35	41.66	2.96	1.83
	4.44					
8MBE64-5872	local database					
	6.6888	3.254	2.5457	35.8482		
		1.6799	4.1082	3.1587		0.8799
3PI	4.5432	3.3082	5.0412	11.6482		
	7.5723			151.8485	7.2778	
	3.4708					
9HTLAG-5877	NIST-STRBASE					
	6.684491979	3.194888179	2.375296912	30.12048193	1.344447432	15.67398119
	4.87804878	1.516990291	5.083884087	3.111387679	8.298755187	0.795165394
3PI	4.055150041	2.766251729	3.539823009	13.36898396		1.388503194
	8.110300081	2.25631769	9.765625		5.157297576	1.983339944
	3.522367031					
9P9DFV-5877	Qualityte database based on STRider					
	7.57	3.33	2.47	40.98	1.43	
	5.10	1.56	5.15	3.05	7.06	0.85
3PI	3.86	3.04	4.40	10.87		1.69
	7.36	2.35	8.93		6.23	1.99
	3.60					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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9QBQKP-5872	FBI PopStats					
		3.5920	3.1289	1.8657	19.380	2.0859
		2.8531	2.4876	4.8497	3.5945	4.6189
3PI		2.3095	3.3445	3.0312	4.5126	1.2933
		11.416	1.5903	8.8183	19.380	3.7313
		3.1807				1.7018
AFLNDE-5877	FBI PopStats, Promega/NIST					
		6.67	3.18	2.34	40.5	1.3
		4.88	1.47	5.09	3.07	9.83
3PI		4.01	2.96	4.27	12.8	1.52
		6.78	2.88	8.13	--	5.73
		3.78				1.94
AJHDUL-5877	NIST-STRBASE					
		6.685	3.195	2.375	30.083	1.345
		4.878	1.517	5.085	3.112	8.3
3PI		4.056	2.766	3.539	13.37	0.795
		8,112	2.256	9.757	120.3	1.388
		3.522				1.984
ARWY24-5872	NIST-STRBASE					
		7.2622	3.9339	1.4841	47.170	1.3721
		3.6036	1.8295	4.7192		9.0744
3PI		4.0683	2.8265	3.6590	10.977	0.92200
		11.806			47.170	1.3333
						1.9670
ATTEFL-5877	User's Manual AmpFISTR Identifier					
			3,42465753		50	1,43228188
		5,5401662	1,53751538			8,21018062
3PI		4,10509031	2,93255132	3,96667989		0,80411708
		7,1942446				1,52392563
		4,08163265				4,59136823
						1,92826841
BQVKU2-5877	NIST-STRBASE					
		6.13	3.12	2.36	19.37	1.33
		4.42	1.49	4.80	2.72	7.39
3PI		3.90	2.66	3.44	10.94	0.790
		7.26			36.41	1.37
		N/A				1.99
BQZZ9N-5872	FBI PopStats					
		6.9638	3.3670	2.7670	40.323	1.3160
		4.9261	1.4961	5.7703	2.8852	9.8522
3PI		4.2088	2.8653	4.2974	10.363	0.81446
		6.9638			40.323	1.5305
		3.7411				1.9608

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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C8ZC9C-5877	NIST-STRBASE					
		6.68	3.19	2.37	30.08	1.34
		4.87	1.51	5.08		8.29
3PI		4.05	2.76	3.53	13.37	1.38
		8.11	2.25	9.75	72.2	5.15
		3.52				1.98
CV64QA-5872	NIST-STRBASE					
		6.1851	3.7673	2.4608	54.5263	1.4949
		4.2634	1.8633	4.9688	3.2994	10.3600
3PI		4.7742	3.2889	4.0390	7.3216	1.4510
		11.3224	2.3000	9.8667	172.6667	3.3912
		3.8158				2.0455
DTFCVH-5877	NIST-STRBASE					
		6.69	3.19	2.38	30.08	1.34
		4.88	1.52	5.08	3.11	8.30
3PI		4.06	2.77	3.54		1.39
		8.11	2.26	9.76		5.16
		3.52				1.98
DUAZED-5877	NIST-STRBASE					
		6.6854	3.1947	2.375	30.0842	1.3445
		4.8783	1.5168	5.0844	3.112	8.2988
3PI		4.0561	2.7663	3.5392	13.3708	1.3885
		8.1123			120.1923	5.157
		3.522				1.9835
EBAAT4-5877	NIST-STRBASE					
		6.6845	3.1949	2.3753	30.1205	1.3444
		4.8780	1.5170	5.0839	3.1114	8.2988
3PI		4.0552	2.7663	3.5398	13.3690	1.3885
		8.1103			119.0476	5.1573
		3.5224				1.9833
ENJRPD-5877	NIST-STRBASE					
		6.69	3.19	2.38	30.1	1.34
		4.88	1.52	5.08	3.11	8.30
3PI		4.06	2.77	3.54	13.4	1.39
		8.11			72.2	5.16
		3.52				1.98
ERKVGZ-5872	NIST-STRBASE					
		6.1843	3.7679	2.4606	50.0000	1.4950
		4.2626	1.8636	4.9677	-	10.3627
3PI		4.7755	3.2884	4.0388	7.3206	1.4510
		11.3250			50.0000	3.3910
		3.8153				2.0458

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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F87XDU-5872	FBI PopStats					
		3.2342		40.323	1.3087	
		4.9261	1.4736		10.050	0.81713
3PI		4.0850	2.9806	4.3085		1.5305
		6.8776			5.7703	1.9608
		3.8052				
FDVD22-5872	NIST-STRBASE					
		6.6845	3.1949	2.3753	30.120	1.3444
		4.8780	1.5170	5.0839		8.2988
3PI		4.0552	2.7663	3.5398	13.369	1.3885
		8.1103	2.2563	9.7656		5.1573
		3.5224				1.9833
FDX37Y-5877	NIST-STRBASE					
		6.13	3.12	2.36	19.4	1.33
		4.42	1.49	4.80	2.72	7.39
3PI		3.90	2.66	3.44	10.9	1.37
		7.26			36.4	4.86
		N/A				1.99
G48YJG-5872	FBI PopStats					
		3.5920	3.1289	1.8657	19.380	2.0859
		2.8531	2.4876	4.8497	3.5945	4.6189
3PI		2.3095	3.3445	3.0312	4.5126	1.2933
		11.416	1.5903	8.8183	19.380	3.7313
		3.1807				1.7018
GDT3MA-5872	[Location Identifying Database]					
		6.68449	3.19489	2.3753	30.12048	1.34445
		4.87805	1.51699	5.08388	3.11139	8.29876
3PI		4.05515	2.76625	3.53982	13.36898	1.3885
		8.1103	2.25632	9.76563	119.04762	5.1573
		3.52237				1.98334
GU22R8-5877	[Location Identifying Database]					
			4.484		87.719	1.884
		2.865	2.404			3.559
3PI		2.798	4.314	3.807		1.040
		18.692				3.671
		4.054				1.743
GW36G9-5872	laboratory specific database					
		8,21	3,52	2,75	30,26	1,44
		4,71	1,61	4,56	2,93	7,12
3PI		4,11	2,99	4,47	10,61	1,59
		7,94	/	/	246,25	7,69
		3,68				2,11

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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H9TEJ8-5872	NIST-STRBASE					
	6.6852	3.1947	2.375	30.0833	1.3445	
	4.8784	1.5168	5.0845	3.1121	8.2989	0.7952
3PI	4.0562	2.7663	3.5392	13.3704		1.3885
	8.1124			72.2000	5.1571	1.9835
	3.5220					
HFE6AA-5872	[Location Identifying Database]					
	5.78	14.87	14.87	16.73	2.15	
	4.13	1.61	4.85	10.36	6.75	0.829
3PI	3.39	2.72	4.01	11.38		2.15
	6.52			46.86	5.20	14.87
	10.36					
HWYZF6-5877	NIST-STRBASE					
	6.685	3.195	2.375	30.121	1.344	
	4.878	1.517	5.084	3.111	8.299	0.795
3PI	4.055	2.766	3.540	13.369		1.389
	8.110			119.048	5.157	1.983
	3.522					
J2C32Z-5872	FBI PopStats, Laboratory Specific Database					
		3.18		40.7	1.3	
	4.9	1.47			9.83	0.813
3PI	4.01	2.96	4.27			1.53
	6.78	2.88	9.58		5.73	1.96
	3.78					
JHJYKY-5877	NIST-STRBASE					
	6.68	3.19	2.38	30.12	1.34	
	4.88	1.52	5.08	3.11	8.30	0.79
3PI	4.06	2.77	3.54	13.37		1.39
	8.11			119.05	5.16	1.98
	3.52					
JLGFXT-5877	NIST-STRBASE					
	6.13	3.12	2.36	19.3	1.33	
	4.42	1.49	4.80	2.72	7.39	0.790
3PI	3.90	2.66	3.44	10.9		1.37
	7.26			36.4	4.86	1.99
	not used -linkage					
K8WKWM-5872	NIST-STRBASE					
	6.6845	3.1949	2.3753	30.120	1.3444	
	4.8780	1.5170	5.0839		8.2988	0.79517
3PI	4.0552	2.7663	3.5398	13.369		1.3885
	8.1103	2.2563	9.7656		5.1573	1.9833
	3.5224					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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K9R2B7-5872	NIST-STRBASE					
	6.6844	3.1948	2.3752	30.1204	1.3444	
	4.8780	1.5169	5.0838	3.1113	8.2987	0.7951
3PI	4.0551	2.7662	3.5398	13.3689		1.3885
	8.1103	2.2563	9.7656		5.1572	1.9833
	3.5223					
KFPQWF-5872	[Location Identifying Database]					
	6.2619	3.4065	2.2278	24.0	1.4118	
	4.5128	1.6552	5.1512	3.1243	7.4894	0.8368
3PI	3.4967	2.8387	4.1905	14.0800		1.5796
	7.2329			527.9998	5.5579	2.0269
	3.9403					
KKHW9X-5872	FBI PopStats					
	6.6845	3.2342	2.3753	38.4615	1.3086	
	4.9261	1.4736	5.0839	3.1114	10.0503	0.8171
3PI	4.0816	2.9806	4.3085	13.3690		1.5305
	6.8776	2.3585	10.4167		5.7703	1.9608
	3.8052					
NBJ97Q-5872	NIST-STRBASE					
	6.68	3.19	2.38	30.1	1.34	
	4.88	1.52	5.08	3.11	8.30	0.795
3PI	4.06	2.77	3.54	13.4		1.39
	8.11	2.26	9.77		5.16	1.98
	3.52					
NQDVAV-5872	NIST-STRBASE					
	6.6844	3.1948	2.3752	30.1204	1.3444	-
	4.8780	1.5169	5.0838	3.1113	8.2987	0.7951
3PI	4.0551	2.7662	3.5398	13.3689		1.3885
	8.1103	-	-	119.0476	5.1572	1.9833
	3.5223					
P2R7J9-5872	FBI PopStats					
	3.59	3.12	1.86	19.38	2.08	
	2.85	2.48	4.84	3.59	4.61	1.36
3PI	2.30	3.34	3.03	4.51		1.29
	11.41	1.59	8.81	19.38	3.73	1.70
	3.18					
P99QKY-5872	FBI PopStats, FBI_extended_Cauc.csv					
	6.4	3.3	2.7	33.9	1.3	
	4.5	1.5	5.4	2.6	8.5	0.81
3PI	4.0	2.7	4.1	8.9		1.5
	6.4			34.4	5.4	2.0
	3.6					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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PMBG2X-5877	NIST-STRBASE					
		6.6845	3.1949	2.3753	30.1205	1.3444
		4.8780	1.5170	5.0839	3.1114	8.2988
3PI		4.0552	2.7663	3.5398	13.3690	1.3885
		8.1103			72.4638	5.1573
	Not Reported					
PTVD6M-5872	FBI PopStats, NIST 2017					
		6.68	3.19	2.37	30.1	1.34
		4.87	1.51	5.08	3.11	8.29
3PI		4.05	2.76	3.53	13.3	1.38
		8.11			N/A	5.15
	N/A					
PTX3AK-5877	FBI PopStats					
		6.6357	3.7994	1.1484	34.722	1.4075
		3.4542	1.5480	4.0984	4.0193	13.928
3PI		2.9851	3.2404	3.0960	16.722	1.2745
		14.409			41.667	2.9647
PU94VJ-5877	FBI PopStats					
		6.6357	3.7994	1.1484	34.722	1.4075
		3.4542	1.548	4.0984	4.0193	13.928
3PI		2.9851	3.2404	3.096	16.722	1.2745
		14.409			41.667	2.9647
QV46G2-5872	Local database					
		6.262	3.406	2.228	24.039	1.412
		4.513	1.656	5.152	3.125	7.491
3PI		3.497	2.839	4.191	14.085	1.580
		7.231			25.000	5.559
		3.940				2.027
QZUGCW-5872	NIST-STRBASE					
		6.6844	3.1948	2.3752	30.1204	1.3444
		4.8780	1.5169	5.0838	3.1113	8.2987
3PI		4.0551	2.7662	3.5398	13.3689	1.3885
		8.1103	2.2563	9.7656		5.1572
		3.5223				1.9833
R3EPWH-5872	FBI PopStats, NIST 2017 population					
		7.2622	3.9339	1.4841	47.170	1.3721
		3.6036	1.8295	4.7192	3.1888	9.0744
3PI		4.0683	2.8265	3.6590	10.977	1.3333
		11.806	2.0610	8.1433	47.170	3.3715
		4.0683				1.9670

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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RBTEVQ-5877	laboratory specific database					
	5.87	3.06	2.68	12.76	1.31	
	3.67	1.3	4.98	2.1	5.97	0.8
3PI	3.5	2.57	3.65	9.05		1.44
	5.63			14.99	4.19	1.9
	3.43					
RKEH3P-5872	NIST-STRBASE					
	6.6845	3.1949	2.3753	30.120	1.3444	
	4.8780	1.5170	5.0839		8.2988	0.79517
3PI	4.0552	2.7663	3.5398	13.369		1.3885
	8.1103	2.2563	9.7656		5.1573	1.9833
	3.5224					
TFFNHU-5872	FBI PopStats					
	6.9638	3.3670	2.7670	40.323	1.3160	
	4.9261	1.4961	5.7703	2.8852	9.8522	0.81446
3PI	4.2088	2.8653	4.2974	10.363		1.5305
	6.9638	2.1268	11.211		5.7703	1.9608
	3.7411					
TNRV34-5872	FBI PopStats					
	6.684	3.194	2.375	30.120	1.344	
	4.878	1.517	5.083	3.111	8.298	0.795
3PI	4.055	2.766	3.539	13.369		1.388
	8.110				5.157	1.983
TYCCNJ-5877	NIST-STRBASE					
	6.13	3.12	2.36	19.4	1.33	
	4.42	1.49	4.80	2.72	7.39	.790
3PI	3.90	2.66	3.44	10.9		1.37
	7.26			36.4	4.86	1.99
	N/A					
TZ8R32-5872	NIST-STRBASE					
		1.597345133	1.1875	15.95791032		
	4.878378378	1.516806723		1.940860215		0.795154185
3PI	2.028089888	2.766283525				1.388461538
				60.16666667		1.46801154
UALBVW-5877	NIST-STRBASE					
	6.18507	3.76727		54.52632	1.49495	10.90526
	4.26337	1.86331		3.29936	10.36000	0.91197
3PI	4.77419	3.28889	4.03899			1.45098
	11.32240	2.30000	9.86667		3.39116	2.04545
	3.81584					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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URUYR6-5872	National Caucasian Database					
	5.86	3.53		16.38	1.36	10.21
	4.01	1.48		2.56	6.57	0.83
3PI	3.87	2.63	3.68			1.50
	6.03	2.30	7.93		4.77	2.00
	3.57					
UZLJPQ-5872	NIST-STRBASE					
	6.6844	3.1948	2.3752	30.1204	1.3444	15.6739
	4.8780	1.5169	5.0838	3.1113	8.2987	0.7951
3PI	4.0551	2.7662	3.5398	13.3689		1.3885
	8.1103	2.2563	9.7656	119.0476	5.1572	1.9833
	3.5223					
V2BAAV-5877	Laboratory Specific Database					
	6.964	3.367	2.767	40.323	1.316	NC
	4.926	1.496	5.770	2.885	9.852	0.814
3PI	4.209	2.865	4.297	NC		1.530
	6.964	2.127	11.211		5.770	1.961
	3.741					
W2RKQF-5872	FBI PopStats, NIST population					
	6.68	3.19	2.37	30.1	1.34	
	4.87	1.51	5.08	3.11	8.29	0.795
3PI	4.05	2.76	3.53	13.3		1.38
	8.11				5.15	1.98
W7GZEM-5872	local database					
	4.46	4.72	2.63	32.1	2.06	
	3.45	2.92	4.22	2.97	3.57	1.02
3PI	4.12	4.52	5.02	5.84		1.41
	11.5			32.1	3.53	1.8
	3.65					
W7KMRU-5877	FBI PopStats					
	6.1843	3.7679	2.4606	54.348	1.495	
	4.2626	1.8636	4.9677	3.2982	10.363	0.91191
3PI	4.7755	3.2884	4.0388	7.3206		1.451
	11.325			172.41	3.391	2.0458
	3.8153					
WAKXNU-5877	FBI PopStats					
	6.1843	3.7679	2.4606	54.348	1.4950	
	4.2626	1.8636	4.9677	3.2982	10.363	0.91191
3PI	4.7755	3.2884	4.0388	7.3206		1.4510
	11.325			172.41	3.3910	2.0458
	3.8153					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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WRGJ6E-5872	FBI PopStats, NIST 2017					
	6.68	3.19	2.37	30.1	1.34	
	4.87	1.51	5.08	3.11	8.29	0.795
3PI	4.05	2.76	3.53	13.3		1.38
	8.11			N/A	5.15	1.98
	N/A					
WYXW8K-5872	NIST-STRBASE					
	6.6845	3.1949	2.3753	30.120	1.3444	
	4.8780	1.5170	5.0839		8.2988	0.79517
3PI	4.0552	2.7663	3.5398	13.369		1.3885
	8.1103	2.2563	9.7656		5.1573	1.9833
	3.5224					
XQMVLJ-5872	FBI PopStats					
	6.6845	3.1949	2.3753	30.120	1.3444	
	4.8780	1.5170	5.0839		8.2988	0.79517
3PI	4.0552	2.7663	3.5398	13.369		1.3885
	8.1103	2.2563	9.7656		5.1573	1.9833
	3.5224					
XWQWMD-5872	NIST-STRBASE					
	6.1843	3.7679	2.4606	54.348	1.4950	
	4.2626	1.8636	4.9677	3.2982	10.363	0.91191
3PI	4.7755	3.2884	4.0388	7.3206		1.4510
	11.325	2.2999	9.8619		3.3910	2.0458
	3.52					
XWTLQB-5872	NIST-STRBASE					
	6.68	3.19	2.37	30.12	1.34	
	4.87	1.51	5.08		8.29	0.79
3PI	4.05	2.76	3.53	13.36		1.38
	8.11	2.25	9.76		5.15	1.98
	3.52					
XZQ8HD-5872	FBI PopStats, NIST 2017 amended frequencies					
	7.2622	3.9339	1.4841	47.170	1.3721	
	3.6036	1.8295	4.7192	3.1888	9.0744	0.92200
3PI	4.0683	2.8265	3.6590	10.977		1.3333
	11.806	2.0610	8.1433	47.170	3.3715	1.9670
	4.0683					
YA99BR-5872	NIST-STRBASE					
	6.18	3.77	2.46	54.35	1.49	
	4.26	1.86	4.97	3.30	10.36	0.91
3PI	4.78	3.29	4.04	7.32		1.45
	11.32			172.41	3.39	2.05
	3.82					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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YGVRZ2-5872	NIST-STRBASE					
	6.685	3.195		30.08	1.345	15.70
	4.878	1.517		3.112	8.299	0.795
3PI	4.056	2.766	3.539			1.388
	8.112	2.256	9.757		5.157	1.984
	3.522					
ZEKBY9-5877	FBI PopStats					
	6.6357	3.7994	1.1484	34.722	1.4075	
	3.4542	1.5480	4.0984	4.0193	13.928	0.82932
3PI	2.9851	3.2404	3.0960	16.722		1.2745
	14.409			41.667	2.9647	1.8335
ZFX3RQ-5872	FBI PopStats					
	6.96	3.37	2.77	100	2.84	
	4.93	1.5	5.77	2.89	9.85	0.81
3PI	4.21	2.87	4.3	10.36		1.53
	6.96	2.13	11.21		5.77	1.96
	3.74					
ZZEH7B-5872	FBI PopStats, NIST 2017					
	6.684	3.194	2.375	30.120	1.344	
	4.878	1.517	5.083	3.111	8.298	0.795
3PI	4.055	2.766	3.539	13.36		1.388
	8.110			N/A	5.157	1.983
	N/A					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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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33G37G-5872	NIST-STRBASE					
	3.1665	4.8169	0.0028	0.0020	0.8301	
	0.0020	0.0040	0.0028	0.0028	0.0020	1.9267
4PI	0.0030	2.3752	0.0010	0.0028		0.0030
	0.0041			0.0064	1.2257	0.0001
	2.1240					
39LYUM-5872	Local Database					
	4.85	3.51			0.72	
						1.62
4PI		1.33				
		1.96			3.77	
	1.69					
3F8R7M-5877	Promega					
	3.1666	4.8170		0	0.8281	0
	0	0		0	0	1.9268
4PI	0	2.3753	0			0
	0	2.9744	0		1.2258	0
	2.1240					
3PVM4G-5877	[Location Identifying Database]					
		8.31		0	0.81	
	0	0			0	1.99
4PI	0	2.38	0			0
	0				1.17	0
	2.43					
6CHZCV-5872	NIST-STRBASE					
	3.0921	3.7679		0	0.7474	0
	0	0		0	0	1.8238
4PI	0	1.6442	0			0
	0	2.3020	0		1.6955	0
	1.9077					
73W8G7-5872	FBI PopStats					
	3.17	4.82	0	0	0.830	
	0	0	0	0	0	1.93
4PI	0	2.38	0	0		0
	0	2.97	0	0	1.23	0
	2.12					
7DPVWQ-5872	FBI PopStats, NIST 2017					
	3.16	4.81	0	0	0.828	
	0	0	0	0	0	1.92
4PI	0	2.37	0	0		0
	0				1.22	0

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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

7F4KV8-5872	laboratory specific database					
	4,761905	3,521127	0,000527	0,002750	0,719942	
	0,001135	0,000117	0,001702	0,000428	0,000002	1,616292
4PI	0,000408	1,336898	0,001975	0,006154		0,000068
	0,000451			0,062500	3,759398	0,000020
	1,678979					
7PKXQF-5872	NIST-STRBASE					
	3.1665	4.8169	0.0028	0.0020	0.8301	
	0.0020	0.0040	0.0028	0.0028	0.0020	1.9267
4PI	0.0030	2.3752	0.0010	0.0028		0.0030
	0.0041			0.0064	1.2257	0.0001
	2.1240					
84E29B-5872	NIST-STRBASE					
	3.1665	4.8169	0.0028	0.0020	0.8301	
	0.0016	0.0028	0.0028	0.0028	0.0019	1.9267
4PI	0.0036	2.3752	0.0022	0.0028		0.0022
	0.0048			0.0064	1.2257	0.0007
	2.1240					
8MBE64-5872	local database					
	3.3444	3.254	0	0		
		0	0	0		1.7599
4PI	0	1.6541	0	0		
	0			0	3.6389	
	1.7354					
9HTLAG-5877	NIST-STRBASE					
	-	-	-	-	-	-
	-	-	-	-	-	-
4PI	-	-	-	-	-	-
	-	-	-	-	-	-
	-					
9P9DFV-5877	Qualityte database based on STRider					
	3.79	3.33	no match	no match	0.71	
	no match	no match	no match	no match	no match	1.70
4PI	no match	1.52	no match	no match		no match
	no match	2.35	no match		3.12	no match
	1.80					
AFLNDE-5877	FBI PopStats, Promega/NIST					
	3.34	3.18	--	--	0.652	--
	--	--	--	--	--	1.62
4PI	--	1.48	--	--		--
	--	2.88	--	--	2.87	--
	1.89					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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

AJHDUL-5877	NIST-STRBASE					
	3.167	4.817	0	0	0.83	
	0	0	0	0	0	1.927
4PI	0	2.375	0	0		0
	0	2.974	0	0	1.226	0
	2.124					
BQVKU2-5877	NIST-STRBASE					
	3.10	4.57	0	0	0.823	
	0	0	0	0	0	1.86
4PI	0	2.26	0	0		0
	0			0	1.25	0
	2.12					
BQZZ9N-5872	FBI PopStats					
	2.7293	6.1728	0	0	0.80567	
	0	0	0	0	0	2.0807
4PI	0	2.5368	0	0		0
	0			0	1.2453	0
	2.6752					
C8ZC9C-5877	NIST-STRBASE					
	3.16	4.81	0	0	0.83	
	0	0	0	0	0	1.92
4PI	0	2.37	0	0		0
	0	2.97	0	0	1.22	0
	2.12					
CV64QA-5872	NIST-STRBASE					
	3.0921	3.7679	0	0	0.7475	
	0	0	0	0	0	1.8238
4PI	0	1.6442	0	0		0
	0			0	1.6955	0
	1.9077					
DTFCVH-5877	NIST-STRBASE					
	2.82	5.05	0.00	0.02	0.87	
	0.00	0.00	0.00	0.00	0.00	2.00
4PI	0.00	2.19	0.00			0.00
	0.00	3.37	0.01		1.40	0.00
	2.62					
DUAZED-5877	NIST-STRBASE					
	3.1668	4.817	0	0	0.8281	
	0	0	0	0	0	1.9267
4PI	0	2.375	0	0		0
	0	2.9739	0	0	1.2258	0
	2.1242					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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

EBAAT4-5877	NIST-STRBASE	3.1666	4.8170		0.8302		
							1.9268
4PI		2.3753			1.2258		
		2.1240					
F87XDU-5872	FBI PopStats	7.9491			0.81077		
							2.0794
4PI		2.5694			1.1351		
		2.7278					
FDX37Y-5877	NIST-STRBASE	3.10	4.57	0.00	0.00	0.823	
		0.00	0.00	0.00	0.00	0.00	1.86
4PI		0.00	2.26	0.00	0.00	0.00	0.00
		0.00			0.00	1.25	0.00
		N/A					
GDT3MA-5872	[Location Identifying Database]	3.16656	4.81696	0	0	0.83015	
		0	0	0	0	0	1.92678
4PI		0	2.3753	0	0		0
		0	2.97442	0	0	1.22579	0
		2.12404					
GU22R8-5877	[Location Identifying Database]	4.484			0.942		
							2.081
4PI		2.157			1.836		
		2.027					
GW36G9-5872	laboratory specific database	4,11	3,52	1,24 E-2	6,99 E-3	0,72	/
		5,41 E-3	7,32 E-4	5,67 E-3	1,34 E-3	8,14 E-6	1,73
4PI		1,11 E-2	1,50	1,01 E-2	1,26 E-2		3,60 E-4
		9,87 E-4	/	/	9,92 E-5	3,84	6,92 E-4
		1,84					
H9TEJ8-5872	NIST-STRBASE	3.3426	3.1947	0.0028	0.001691	0.6723	
		0.001348	0.002031	0.0028	0.0028	0.001743	1.5903
4PI		0.00253	1.3831	0.001709	0.0028		0.002021
		0.003713			0.0064	2.5786	0.0001300
		1.7610					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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

J2C32Z-5872	FBI PopStats, Laboratory Specific Database					
		7.61		0.002	0.806	
		0.002	0.004		0.002	2.06
4PI		0.003	2.5	0.001		0.003
		0.006	3.49	0.001	1.13	0.00014
		2.69				
JHJYKY-5877	NIST-STRBASE					
		3.17	4.82	0.00	0.00	0.83
		0.00	0.00	0.00	0.00	1.93
4PI		0.00	2.38	0.00	0.00	0.00
		0.00		0.00	1.23	0.00
		2.12				
JLGFXT-5877	NIST-STRBASE					
		3.10	4.57	0	0	0.823
		0	0	0	0	1.86
4PI		0	2.26	0	0	0
		0		0	1.25	0
		2.12				
KKHW9X-5872	FBI PopStats					
		3.1666	7.9491	0	0	0.8108
		0	0	0	0	2.0794
4PI		0	2.5694	0	0	0
		0	2.7364	0	1.1351	0
		2.7278				
NBJ97Q-5872	NIST-STRBASE					
		3.17	4.82	0	0	0.830
		0	0	0	0	1.93
4PI		0	2.38	0	0	0
		0	2.97	0	1.23	0
		2.12				
NQDVAV-5872	NIST-STRBASE					
		3.1665	4.8169	0.0028	0.0020	0.8301
		0.0020	0.0040	0.0028	0.0028	1.9267
4PI		0.0030	2.3752	0.0010	0.0028	0.0030
		0.0041	-	-	0.0064	1.2257
		0.0001				
		2.1240				
P99QKY-5872	FBI PopStats, FBI_extended_Cauc.csv					
		3.1	4.6	0	0	0.8
		0	0	0	0	1.9
4PI		0	2.3	0	0	0
		0		0	1.2	0
		2.1				

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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

PMBG2X-5877	NIST-STRBASE					
	3.1666	4.8170	0.0000	0.0000	0.8302	
	0.0000	0.0000	0.0000	0.0000	0.0000	1.9268
4PI	0.0000	2.3753	0.0000	0.0000		0.0000
	0.0000			0.0000	1.2258	0.0000
	2.1240					
PTVD6M-5872	FBI PopStats, NIST 2017					
	3.16	4.81	0	0	0.828	
	0	0	0	0	0	1.92
4PI	0	2.37	0	0		0
	0			N/A	1.22	0
	N/A					
RBTEVQ-5877	laboratory specific database					
	3.54	3.06	0.0	0.0	0.68	
	0.0	0.0	0.0	0.0	0.0	1.52
4PI	0.0	1.39	0.0	0.0		0.0
	0.0			0.0	2.38	0.0
	1.9					
TNRV34-5872	FBI PopStats					
	3.166	4.817			0.828	
						1.926
4PI		2.375				
					1.225	
TYCCNJ-5877	NIST-STRBASE					
	3.10	4.57	0	0	.823	
	0	0	0	0	0	1.86
4PI	0	2.26	0	0		0
	0			0	1.25	0
	2.12					
UALBVV-5877	NIST-STRBASE					
	6.18507	3.76727		0.00545	1.49495	0.01091
	0.00213	0.00037		0.00066	0.00001	0.91197
4PI	0.00119	3.28889	0.00202			0.00015
	0.00057	2.30000	0.00987		3.39116	0.00020
	3.81584					
V2BAAV-5877	Laboratory Specific Database					
	2.729	6.173	0.000	0.000	0.806	NC
	0.000	0.000	0.000	0.000	0.000	2.081
4PI	0.000	2.537	0.000	NC		0.000
	0.000	3.687	0.000		1.245	0.000
	2.675					

TABLE 2

WebCode-Test	Population Database(s)					
	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
Item	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

W2RKQF-5872	FBI PopStats, NIST population					
	3.16	4.81	0	0	0.828	
	0	0	0	0	0	1.92
4PI	0	2.37	0	0		0
	0				1.22	0
<hr/>						
W7KMRU-5877	FBI PopStats					
	3.0921	3.7679			0.7475	
						1.8238
4PI		1.6442				
					1.6955	
	1.9077					
<hr/>						
WAKXNU-5877	FBI PopStats					
	3.0921	3.7679			0.74750	
						1.8238
4PI		1.6442				
					1.6955	
	1.9077					
<hr/>						
WRGJ6E-5872	FBI PopStats, NIST 2017					
	3.16	4.81	0	0	0.828	
	0	0	0	0	0	1.92
4PI	0	2.37	0	0		0
	0			N/A	1.22	0
	N/A					
<hr/>						
ZZEH7B-5872	FBI PopStats, NIST 2017					
	3.166	4.817	0	0	0.828	
	0	0	0	0	0	1.926
4PI	0	2.375	0	0		0
	0			NA	1.225	0
	NA					

YSTR Amplification Kit(s) & Results

TABLE 3

WebCode-Test Item	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
Item 3 - YSTR Results									
33G37G-5872	Yfiler®								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		
							23		11
39LYUM-5872	PowerPlex® Y 23 System								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		24
		12	13	17	18		23	10	11
3ECBR6-5877	Yfiler® Plus								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		11
3F8R7M-5877	PowerPlex® Y Y23								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		24
		12	13	17	18		23	10	11
77PJU3-5877	Yfiler® Plus								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		11
786NQE-5872	PowerPlex® Y								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		24
		12	13	17	18		23	10	11
7PKXQF-5872	Yfiler®								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		
							23		11
84E29B-5872	Yfiler®								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		
							23		11
9HTLAG-5877	Yfiler® Plus								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		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									
9P9DFV-5877	PowerPlex® Y								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		24
		12	13	17	18		23	10	11
AJHDUL-5877	PowerPlex® Y 23								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		24
		12	13	17	18		23	10	11
CV64QA-5872	Yfiler®								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		11
GDT3MA-5872	PowerPlex® Y 23								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		24
		12	13	17	18		23	10	11
GW36G9-5872	Yfiler® Plus								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12	/	17	18	22	23	/	11
H9TEJ8-5872	Yfiler® Plus								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		11
HWYZF6-5877	Yfiler® PLUS								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		11
KKHW9X-5872	PowerPlex® Y 23								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		24
		12	13	17	18		23	10	11
NQDVAW-5872	Yfiler®								
	-	15	11,14	14	30	24	10	13	13
3	15	12	12	20	-	15	17	-	-
	-	-	-	-	-	-	23	-	11
PMD6KW-5872	PowerPlex® Y 23								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		24
		12	13	17	18		23	10	11

TABLE 3

WebCode-Test Item	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
Item 3 - YSTR Results									
PTX3AK-5877	Yfiler® Plus								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		11
PU94VJ-5877	Yfiler® Plus								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		11
UALBVW-5877	Yfiler®								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		
							23		11
URUYR6-5872	Yfiler® Plus								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		11
UZLJPQ-5872	PowerPlex® Y 23								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		24
		12	13	17	18		23	10	11
V2BAAV-5877	ForenSeq Signature Prep - Primer Set B								
	35,37	15	11,14	14	30	24	10	13	
3	15	12	12	20				10	24
		12	13	17	18		23	10	11
WYXW8K-5872	Yfiler®								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		
							23		11
XQMVLJ-5872	Yfiler®								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		
							23		11
XWTLQB-5872	Yfiler®								
		15	11,14	14	30	24	10	13	13
3	15	12	12	20		15	17		
							23		11
ZEKBY9-5877	Yfiler® Plus								
	35,37	15	11,14	14	30	24	10	13	13
3	15	12	12	20	29	15	17	10	24
	38	12		17	18	22	23		11

TABLE 3

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

Item 3 - YSTR Results

WebCode-Test	Amplification Kit	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
ZFX3RQ-5872	PowerPlex® Y Y23		15	11,14	14	30	24	10	13	13
3		15	12	12	20		15	17		24
			12	13	17	18		23	10	11

TABLE 3

WebCode-Test Item	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
Item 4 - YSTR Results									
33G37G-5872	Yfiler®								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		
							21		11
39LYUM-5872	PowerPlex® Y 23 System								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		24
		11	11	18	17		21	14	11
3ECBR6-5877	Yfiler® Plus								
	39,40	16	18	13	30	21	10	11	15
4	14	11	12	21	31	16	16	10	24
	39	11		18	17	22	21		11
3F8R7M-5877	PowerPlex® Y Y23								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		24
		11	11	18	17		21	14	11
77PJU3-5877	Yfiler® Plus								
	39,40	16	18	13	30	21	10	11	15
4	14	11	12	21	31	16	16	10	24
	39	11		18	17	22	21		11
786NQE-5872	PowerPlex® Y								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		24
		11	11	18	17		21	14	11
7PKXQF-5872	Yfiler®								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		
							21		11
84E29B-5872	Yfiler®								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		
							21		11
9HTLAG-5877	Yfiler® Plus								
	39,40	16	18	13	30	21	10	11	15
4	14	11	12	21	31	16	16	10	24
	39	11		18	17	22	21		11
9P9DFV-5877	PowerPlex® Y								
		16	18,18	13	30	21	10	11	15
4	14	11	12	21		16	16		24
		11	11	18	17		21	14	11

TABLE 3

WebCode-Test		Amplification Kit								
		DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
Item		DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
		DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	Y GATA H4
Item 4 - YSTR Results										
AJHDUL-5877		PowerPlex® Y 23								
		16	18,18	13	30	21	10	11	15	
4		14	11	12	21	16	16	16	24	
		11	11	18	17		21	14	11	
CV64QA-5872		Yfiler®								
		39,40	16	18	13	30	21	10	11	15
4		14	11	12	21	31	16	16	10	24
		39	11		18	17	22	21		11
GDT3MA-5872		PowerPlex® Y 23								
		16	18,18	13	30	21	10	11	15	
4		14	11	12	21	16	16	16	24	
		11	11	18	17		21	14	11	
GW36G9-5872		Yfiler® Plus								
		39,40	16	18,18	13	30	21	10	11	15
4		14	11	12	21	31	16	16	10	24
		39	11	/	18	17	22	21	/	11
H9TEJ8-5872		Yfiler® Plus								
		39,40	16	18,18	13	30	21	10	11	15
4		14	11	12	21	31	16	16	10	24
		39	11		18	17	22	21		11
HWYZF6-5877		Yfiler® PLUS								
		39,40	16	18,18	13	30	21	10	11	15
4		14	11	12	21	31	16	16	10	24
		39	11		18	17	22	21		11
KKHW9X-5872		PowerPlex® Y 23								
		16	18	13	30	21	10	11	15	
4		14	11	12	21	16	16	16	24	
		11	11	18	17		21	14	11	
NQDVAW-5872		Yfiler®								
		-	16	18	13	30	21	10	11	15
4		14	11	12	21	-	16	16	-	-
		-	-	-	-	-	21	-	-	11
PMD6KW-5872		PowerPlex® Y 23								
		16	18,18	13	30	21	10	11	15	
4		14	11	12	21	16	16	16	24	
		11	11	18	17		21	14	11	
PTX3AK-5877		Yfiler® Plus								
		39,40	16	18	13	30	21	10	11	15
4		14	11	12	21	31	16	16	10	24
		39	11		18	17	22	21		11

TABLE 3

WebCode-Test Item	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
Item 4 - YSTR Results									
PU94VJ-5877	Yfiler® Plus								
	39,40	16	18	13	30	21	10	11	15
4	14	11	12	21	31	16	16	10	24
	39	11		18	17	22	21		11
UALBVW-5877	Yfiler®								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		
							21		11
URUYR6-5872	Yfiler® Plus								
	39,40	16	18,18	13	30	21	10	11	15
4	14	11	12	21	31	16	16	10	24
	39	11		18	17	22	21		11
UZLJPQ-5872	PowerPlex® Y 23								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		24
		11	11	18	17		21	14	11
V2BAAV-5877	ForenSeq Signature Prep - Primer Set B								
	39,40	16	18	13	30	21	10	11	
4	14	11	12	21				10	24
		11	11	18	17		21	14	11
WYXW8K-5872	Yfiler®								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		
							21		11
XQMV LJ-5872	Yfiler®								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		
							21		11
XWTLQB-5872	Yfiler®								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		
							21		11
ZEKBY9-5877	Yfiler® Plus								
	39,40	16	18	13	30	21	10	11	15
4	14	11	12	21	31	16	16	10	24
	39	11		18	17	22	21		11
ZFX3RQ-5872	PowerPlex® Y Y23								
		16	18	13	30	21	10	11	15
4	14	11	12	21		16	16		24
		11	11	18	17		21	14	11

Additional DNA & PI Results

TABLE 4

Locus	WebCode-Test	Item 1	Item 2	Item 3	Item 3 PI	Item 4	Item 4 PI
D17S1301	V2BAAV-5877	12	12	11,12	NC	12	NC
D20S482	V2BAAV-5877	14	14,15	14,15	NC	14,15	NC
D4S2408	V2BAAV-5877	9	9,10	8,10	NC	10	NC
D9S1122	V2BAAV-5877	12,13	13	11,13	NC	13,14	NC
DXS10074	V2BAAV-5877	18,19	8,18	8	NC	13	NC
DXS10103	V2BAAV-5877	19,20	19,20	19	NC	19	NC
DXS10135	V2BAAV-5877	20,25	25,26	26	NC	21	NC
DXS7132	V2BAAV-5877	14	13,14	13	NC	13	NC
DXS7423	V2BAAV-5877	14	13,14	13	NC	14	NC
DXS8378	V2BAAV-5877	11	11,12	12	NC	12	NC
DYS389I	V2BAAV-5877	NR	14	-	-	-	-
DYS438	V2BAAV-5877	NR	9	-	-	-	-
DYS505	V2BAAV-5877	NR	NR	12	-	13	-
DYS522	V2BAAV-5877	NR	NR	10	-	11	-
DYS612	V2BAAV-5877	NR	NR	30	-	30	-
F13A	3F8R7M-5877	6,7	6,7	6,7	1.5011	3.2	0
F13A01	73W8G7-5872	6,7	6,7	6,7	1.50	3.2	0
	786NQE-5872	6,7	6,7	6,7	1.50	3.2	
	UZLJPQ-5872	6,7	6,7	6,7	1.5042	3.2	
F13B	3F8R7M-5877	8,10	8,10	8,10	1.5694	6	0
	73W8G7-5872	8,10	8,10	8,10	1.57	6	0
	786NQE-5872	8,10	8,10	8,10	1.57	6	
	UZLJPQ-5872	8,10	8,10	8,10	1.5730	6	
FES/FPS	73W8G7-5872	8,11	8,10	10,11	1.77	10,13	2.22
FESFPS	3F8R7M-5877	8,11	8,10	10,11	1.7781	10,13	2.2212
	786NQE-5872	8,11	8,10	10,11	1.77	10,13	
HPRTB	V2BAAV-5877	13	12,13	12	NC	13	NC
LPL	3F8R7M-5877	10,11	10,11	10,11	1.4556	9,12	0
	73W8G7-5872	10,11	10,11	10,11	1.46	9,12	0
	786NQE-5872	10,11	10,11	10,11	1.46	9,12	
	UZLJPQ-5872	10,11	10,11	10,11	1.4558	9,12	
PENTA C	3F8R7M-5877	11,12	11	11	2.5246	10,12	0
	73W8G7-5872	11,12	11	11	2.53	10,12	0
	786NQE-5872	11,12	11	11	2.53	10,12	
	UZLJPQ-5872	11,12	11	11	2.5335	10,12	

Paternity DNA Statistics & Conclusions

TABLE 5

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
33G37G-5872	Item 3 - Alleged Father A	4.0684E+13	99.9999%	NIST-STRBASE
39LYUM-5872	Item 3 - Alleged Father A	2.298E+15	>99.999999%	Local Database
3ECBR6-5877	Item 3 - Alleged Father A	2.999 trillion	>99.99%	FBI PopStats
3F8R7M-5877	Item 3 - Alleged Father A	11,253,654,216,751.2000	99.9999	Promega
3FRDYD-5877	Item 3 - Alleged Father A	3.6370E+13	>99.9999%	FBI PopStats
3LW7VU-5872	Item 3 - Alleged Father A	237827.954	0.999999	NIST-STRBASE
3M2YKL-5877	Item 3 - Alleged Father A	1.7E14	(lab does not calculate)	NIST-STRBASE
3PVM4G-5877	Item 3 - Alleged Father A	244,363,200	99.99%	[Location Identifying Database]
63UDXK-5872	Item 3 - Alleged Father A	821,300,000,000	99.9999999998782	FBI PopStats
6CHZCV-5872	Item 3 - Alleged Father A	3.131E+12	0.99999999999681	NIST-STRBASE
73W8G7-5872	Item 3 - Alleged Father A	1.39E+16	>99.99999999%	FBI PopStats
77PJU3-5877	Item 3 - Alleged Father A	2,999,000,000,000	>99.99%	FBI PopStats
786NQE-5872	Item 3 - Alleged Father A	217050705216570000,00	99.99999999999999%	NIST-STRBASE
7DPWVQ-5872	Item 3 - Alleged Father A	97,020,000,000	99.9999%	FBI PopStats, NIST 2017
7F4KV8-5872	Item 3 - Alleged Father A	74 259 915 897 331	0,99999999999998	laboratory specific database
7PKXQF-5872	Item 3 - Alleged Father A	4.0684E+13	99.9999%	NIST-STRBASE
84E29B-5872	Item 3 - Alleged Father A	4.0668E+13	99.9999%	NIST-STRBASE
8D3UK9-5877	Item 3 - Alleged Father A	36 trillion		FBI PopStats
8MBE64-5872	Item 3 - Alleged Father A	976 693 341 000	99.99999999%	local database
9HTLAG-5877	Item 3 - Alleged Father A	118,030,106,799,956.000	99.99999999 %	NIST-STRBASE

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
9P9DFV-5877	Item 3 - Alleged Father A	17896140666623	99.9999999999	Qualitytype database based on STRider
9QBQKP-5872	Item 3 - Alleged Father A	5.6660E+12	>99.99	FBI PopStats
AFLNDE-5877	Item 3 - Alleged Father A	15300000000000	99.99999999	FBI PopStats, Promega/NIST
AJHDUL-5877	Item 3 - Alleged Father A	9.047322923e+014	>0,999999	NIST-STRBASE
ARWY24-5872	Item 3 - Alleged Father A	1.62 trillion	>99.9999999999	NIST-STRBASE
ATTEFL-5877	Item 3 - Alleged Father A	244363182,357694	0,99999999590773	User's Manual AmpFISTR Identifier
BQVKU2-5877	Item 3 - Alleged Father A	800 billion	N/A	NIST-STRBASE
BQZZ9N-5872	Item 3 - Alleged Father A	8,852,000,000,000	99.9999999999	FBI PopStats
C8ZC9C-5877	Item 3 - Alleged Father A	1.7E+14	not reported	NIST-STRBASE
CV64QA-5872	Item 3 - Alleged Father A	4524809048000000	99.99999999999999	NIST-STRBASE
DTFCVH-5877	Item 3 - Alleged Father A	249924148358.481	99.99%	NIST-STRBASE
DUAZED-5877	Item 3 - Alleged Father A	41,048,120,092,842.0000	>99.9999%	NIST-STRBASE
EAH9U8-5872	Item 3 - Alleged Father A	3198309526174,30	99,9999999999687	NIST-STRBASE
EBAAT4-5877	Item 3 - Alleged Father A	40,684,960,727,681	99.9999	NIST-STRBASE
ENJRPD-5877	Item 3 - Alleged Father A	2.47e13	99.99999999%	NIST-STRBASE
ERKVGZ-5872	Item 3 - Alleged Father A	1.61 x 10 ¹³	99.9999%	NIST-STRBASE
F87XDU-5872	Item 3 - Alleged Father A	241,900,000	99.9999995866	FBI PopStats
FDVD22-5872	Item 3 - Alleged Father A	2.4 trillion	99.9999%	NIST-STRBASE
FDX37Y-5877	Item 3 - Alleged Father A	800 billion	N/A	NIST-STRBASE
G48YJG-5872	Item 3 - Alleged Father A	5.6660E+12	>99.9999999999	FBI PopStats

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
GDT3MA-5872	Item 3 - Alleged Father A	896466763552045	99.9999999999998%	[Location Identifying Database]
GU22R8-5877	Item 3 - Alleged Father A	577023761	99.999999%	[Location Identifying Database]
GW36G9-5872	Item 3 - Alleged Father A	2,33 E14	99,99999999%	laboratory specific database
H9TEJ8-5872	Item 3 - Alleged Father A	2.4659E+13	99.99999999%	NIST-STRBASE
HFE6AA-5872	Item 3 - Alleged Father A	3.86E12	99.99	[Location Identifying Database]
HWYZF6-5877	Item 3 - Alleged Father A	40656499776388.36	99.99%	NIST-STRBASE
J2C32Z-5872	Item 3 - Alleged Father A	Black Individual: 660,000,000,000 ; Caucasian Individual: 5,900,000,000 ; Hispanic Individual: 4,200,000,000 ; Asian Individual: 640,000,000	99.99	FBI PopStats, Laboratory Specific Database
JHJYKY-5877	Item 3 - Alleged Father A	40,684,960,727,681.70	99.9999%	NIST-STRBASE
JLGFXT-5877	Item 3 - Alleged Father A	800 billion	n/a	NIST-STRBASE
K4UEK3-5872	Item 3 - Alleged Father A	27E+021	99.999999999999999999%	[Laboratory Identifying Database]
K8WKWM-5872	Item 3 - Alleged Father A	2.4 trillion	99.9999%	NIST-STRBASE
K9R2B7-5872	Item 3 - Alleged Father A	7.53 trillion	99.9%	NIST-STRBASE
KFPQWF-5872	Item 3 - Alleged Father A	190,227,293,159,548	99.99999997	[Location Identifying Database]
KKHW9X-5872	Item 3 - Alleged Father A	19,013,528,311,370.9000	99.9999%	FBI PopStats
L2XMK2-5872	Item 3 - Alleged Father A			Country Database
NBJ97Q-5872	Item 3 - Alleged Father A	7.53 trillion	99.99%	NIST-STRBASE
NQDVAW-5872	Item 3 - Alleged Father A	4.0667 E+13	99.9999%	NIST-STRBASE
P2R7J9-5872	Item 3 - Alleged Father A	5.66E+12	99.99	FBI PopStats

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
P99QKY-5872	Item 3 - Alleged Father A	8.06441E12	99.9999999999%	FBI PopStats, FBI_extended_Cauc.csv
PMBG2X-5877	Item 3 - Alleged Father A	7.030 trillion	99.9999%	NIST-STRBASE
PMD6KW-5872	Item 3 - Alleged Father A			
PTVD6M-5872	Item 3 - Alleged Father A	97,020,000,000	99.9999	FBI PopStats, NIST 2017
PTX3AK-5877	Item 3 - Alleged Father A	2,999,000,000,000	>99.99%	FBI PopStats
PU94VJ-5877	Item 3 - Alleged Father A	2.999x10 ¹²	>99.99%	FBI PopStats
QHBLZA-5872	Item 3 - Alleged Father A	7.311e+011	N/A	NIST-STRBASE
QV46G2-5872	Item 3 - Alleged Father A	9.026E+12	Not calculated	Local database
QZUGCW-5872	Item 3 - Alleged Father A	7.53 trillion	99.9%	NIST-STRBASE
R3EPWH-5872	Item 3 - Alleged Father A	353 trillion	99.99%	FBI PopStats, NIST 2017 population
RBTEVQ-5877	Item 3 - Alleged Father A	1.90e+011	99.9999999999%	laboratory specific database
RKEH3P-5872	Item 3 - Alleged Father A	2.4 trillion Caucasian population	99.9999%	NIST-STRBASE
TFFNHU-5872	Item 3 - Alleged Father A	19,580,000,000,000	99.9999999999%	FBI PopStats
TNRV34-5872	Item 3 - Alleged Father A	97,020,000,000	99.9999%	FBI PopStats
TYCCNJ-5877	Item 3 - Alleged Father A	800,000,000,000	N/A	NIST-STRBASE
TZ8R32-5872	Item 3 - Alleged Father A	237827.954	0.999999	NIST-STRBASE
UALBVW-5877	Item 3 - Alleged Father A	3209955155419.29000	0.999999999997	NIST-STRBASE
URUYR6-5872	Item 3 - Alleged Father A	83 billion	NA	National Caucasian Database
UZLJPQ-5872	Item 3 - Alleged Father A	122.633.648.400.000.000	99.99999999%	NIST-STRBASE
V2BAAV-5877	Item 3 - Alleged Father A	1.8 trillion	>99.99%	Laboratory Specific Database

TABLE 5 - Paternity DNA Statistics & Conclusions

WebCode-Test	Chosen Biological Father	Combined Paternity Index	Probability of Paternity	Population Database Used
W2RKQF-5872	Item 3 - Alleged Father A	97,020,000,000	99.9999%	FBI PopStats, NIST population
W7GZEM-5872	Item 3 - Alleged Father A	1.1e13	99.9999%	local database
W7KMRU-5877		199,500,000,000,000	>99.9999999999	FBI PopStats
WAKXNU-5877	Item 3 - Alleged Father A	199,000,000,000,000	99.9999999999	FBI PopStats
WRGJ6E-5872	Item 3 - Alleged Father A	97,020,000,000	99.9999%	FBI PopStats, NIST 2017
WYXW8K-5872	Item 3 - Alleged Father A	2.4 trillion	99.9999%	NIST-STRBASE
XQMVLJ-5872	Item 3 - Alleged Father A	2,400,000,000,000	99.9999%	FBI PopStats
XWQWMD-5872	Item 3 - Alleged Father A	6.8790e+12		NIST-STRBASE
XWTLQB-5872	Item 3 - Alleged Father A	2,400,000,000,000	99.9999%	NIST-STRBASE
XZQ8HD-5872	Item 3 - Alleged Father A	353 trillion	99.99%	FBI PopStats, NIST 2017 amended frequencies
YA99BR-5872	Item 3 - Alleged Father A	1.995e+014	99.999999999%	NIST-STRBASE
YGVZR2-5872	Item 3 - Alleged Father A	>100 billion		NIST-STRBASE
ZEKBY9-5877	Item 3 - Alleged Father A	2.9990E+12	>99.99%	FBI PopStats
ZFX3RQ-5872	Item 3 - Alleged Father A	105,087,705,561,667.3	99.99%	FBI PopStats
ZZEH7B-5872	Item 3 - Alleged Father A	97020000000	99.9999%	FBI PopStats, NIST 2017

Paternity DNA Statistics Response Summary		Participants: 93
<i>Which of the alleged fathers cannot be excluded as the biological parent of Item 2?</i>		
Responses	Item 3 - Alleged Father A	92
	Item 4 - Alleged Father B	0
	Inconclusive	0
	No Response	1

Kinship Likelihood Ratio Results

TABLE 6

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D1S1656	33G37G-5872	$(1+4s)/8s$	$s=15$	1.2916
	39LYUM-5872	$(1+4p)/8p$	$p=15$	1.292
	3ECBR6-5877	$(1+4p)/8p$	$p=15$	1.292
	3F8R7M-5877	$1+4p/8p$	$p=15$	1.2916
	73W8G7-5872	$(1+4p)/8p$	$p = 15$	1.292
	77PUJ3-5877	$(1+4p)/(8p)$	$p = 15$	1.2916
	786NQE-5872	$(1+4p)/8p$	$P=15$	1.292
	7F4KV8-5872	$(1+4p)/8p$	$p = 15$	1.291640279
	7PKXQF-5872	$(1+4s)/8s$	$s=15$	1.2916
	84E29B-5872	$(1+4s)/8s$	$s=15$	1.2916
	8MBE64-5872	$(1+4p)/8p$	$p = 15$	1.2916
	9HTLAG-5877	$1+4p/8p$	$p=15$	1.291640279
	AFLNDE-5877	$(1+4s)/8s$	$s=0.1579$	1.2916
	BQVKU2-5877	*	*	1.267
	CV64QA-5872	$4p+1/8p$	$p=15$	1.2916
	DUAZED-5877	$(1+4p)/8p$	$p=15$	1.2916
	EBAAT4-5877	$(1+4p)/8p$	$p=15$	1.2916
	ENJRPD-5877	$(1+4p)/8p$	$p=15$	1.29
	ERKVGZ-5872	$(1+4p)/8p$	$p = 15$	1.2916
	FDX37Y-5877	N/A	N/A	1.267
GDT3MA-5872	$(1+4p)/8p$	$p = 15$	1.291	
GU22R8-5877	$(1+4p)/8p$	$p=15$	1.292	
GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=15 C=12$	1.291640298	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D1S1656	H9TEJ8-5872	$(1+4p)/8p$	$p=15$	1.2916
	HWYZF6-5877	$(1+4p)/8p$	$p=15$	1.292
	JHJYKY-5877	$(1+4p)/8p$	$p=15$	1.2916
	JLGFXT-5877	*	*	1.267
	KKHW9X-5872	$(1+4p)/8p$	$p=15$	1.2916
	NBJ97Q-5872	$(1+4q)/8q$	$q=15$ $r=16.3$ $p=12$	1.292
	NQDVAW-5872	$(1+4p)/8p$	$p=15$	1.2916
	P99QKY-5872	$0.5+1(4p)$	$P=15$	1.1316
	PTX3AK-5877	$(1+4p)/8p$	$p=15$	1.2916
	PU94VJ-5877	$(1+4p)/8p$	$p=15$	1.2916
	TYCCNJ-5877	N/A	N/A	01.267
	UALBVW-5877	$(4q+1)/(8q)$	$q=15$	1.292
	URUYR6-5872	$(1+4p)/8p$	$p=15$	1.292
	UZLJPQ-5872	$4a+1/8a$	$a=15$	1.2916
	W7GZEM-5872	$(1+4q)/8q$	$q=15$	1.2916
	W7KMRU-5877	$(1+4p)/8p$	$p=15$	1.2916
	WAKXNU-5877	$(1+4p)/8p$	$p=15$	1.292
	YGVZ2-5872	$(z1/4pa)+z0$	$a=15$	1.292
	ZEKBY9-5877	$(1+4p)/8p$	$p=15$	1.2916
	ZFX3RQ-5872	$1+4p/8p$	$p=15$	1.292

Statistical Analysis Summary of D1S1656
Likelihood Ratio Mode: 1.2916

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S1338	33G37G-5872	$(1 + 4s)/8s$	s=22	1.4097
	39LYUM-5872	$(1 + 4p)/8p$	p=22	1.410
	3ECBR6-5877	$(1 + 4p)/8p$	p=22	1.410
	3F8R7M-5877	$1 + 4q/8q$	q=22	1.4098
	73W8G7-5872	$(1 + 4p)/8p$	p = 22	1.410
	77PJU3-5877	$(1 + 4p)/(8p)$	p = 22	1.4098
	786NQE-5872	$(1 + 4p)/8p$	P=22	1.410
	7F4KV8-5872	$(1 + 4p)/8p$	p = 22	1.409752547
	7PKXQF-5872	$(1 + 4s)/8s$	s=22	1.4097
	84E29B-5872	$(1 + 4s)/8s$	s=22	1.4098
	8MBE64-5872	$(1 + 4p)/8p$	p = 22	1.4098
	9HTLAG-5877	$1 + 4p/8p$	p=22	1.409752547
	AFLNDE-5877	$(1 + 4s)/8s$	s=0.1374	1.4098
	BQVKU2-5877	*	*	1.373
	CV64QA-5872	$4p + 1/8p$	p=22	1.4098
	DUAZED-5877	$(1 + 4q)/8q$	q=22	1.4098
	EBAAT4-5877	$(1 + 4p)/8p$	p=22	1.4098
	ENJRPD-5877	$(1 + 4p)/8p$	p=22	1.41
	ERKVGZ-5872	$(1 + 4p)/8p$	p = 22	1.4098
	FDX37Y-5877	N/A	N/A	1.373
	GDT3MA-5872	$(1 + 4p)/8p$	p = 22	1.409
	GU22R8-5877	$(1 + 4p)/8p$	p=22	1.410
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	A=22 C=19	1.409752544
H9TEJ8-5872	$(1 + 4p)/8p$	p=22	1.4098	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S1338	HWYZF6-5877	$(1+4p)/8p$	$p=22$	1.410
	JHJYKY-5877	$(1+4q)/8q$	$q = 22$	1.4098
	JLGFXT-5877	*	*	1.373
	KKHW9X-5872	$(1+4q)/8q$	$q=22$	1.4098
	NBJ97Q-5872	$(1+4r)/8r$	$q=21 r=22 p=19$	1.410
	NQDVAW-5872	$(1+4p)/8p$	$p=22$	1.4097
	P99QKY-5872	$0.5+1(4p)$	$P=22$	1.0496
	PTX3AK-5877	$(1+4p)/8p$	$p=22$	1.4098
	PU94VJ-5877	$(1+4p)/8p$	$p = 22$	1.4098
	TYCCNJ-5877	N/A	N/A	1.373
	UALBVW-5877	$(4q+1)/(8q)$	$q=22$	1.410
	URUYR6-5872	$(1+4p)/8p$	$p = 22$	1.41
	UZLJPQ-5872	$4a+1/8a$	$a=22$	1.4097
	W7GZEM-5872	$(1+4a)/8a$	$a=22$	1.4098
	W7KMRU-5877	$(1+4p)/8p$	$p = 22$	1.4098
	WAKXNU-5877	$(1+4p)/8p$	$p=22$	1.410
	YGVZ2-5872	$(z1/4pa)+z0$	$a=22$	1.410
	ZEKBY9-5877	$(1+4p)/8p$	$p=22$	1.4098
	ZFX3RQ-5872	$1+4p/8p$	$p=22$	1.41

Statistical Analysis Summary of D2S1338
Likelihood Ratio Mode: 1.4098

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S441	33G37G-5872	$(1+4p)/8p$	$p=11$	0.8447
	39LYUM-5872	$(1+4p)/8p$	$p=11$	0.845
	3ECBR6-5877	$(1+4p)/8p$	$p=11$	0.8447
	3F8R7M-5877	$1+4p/8p$	$p=11$	0.8447
	73W8G7-5872	$(1+4p)/8p$	$p=11$	0.8447
	77PUJ3-5877	$(1+4p)/(8p)$	$p=11$	0.84473
	786NQE-5872	$(1+4p)/8p$	$P=11$	0.845
	7F4KV8-5872	$(1+4p)/8p$	$p=11$	0.844732487
	7PKXQF-5872	$(1+4p)/8p$	$p=11$	0.8447
	84E29B-5872	$(1+4p)/8p$	$p=11$	0.8447
	8MBE64-5872	$(1+4p)/8p$	$p=11$	0.8447
	9HTLAG-5877	$1+4p/8p$	$p=11$	0.844732488
	AFLNDE-5877	$(1+4p)/8p$	$p=0.3626$	0.8447
	BQVKU2-5877	*	*	0.8459
	CV64QA-5872	$4p+1/8p$	$p=11$	0.8447
	DUAZED-5877	$(1+4p)/8p$	$p=11$	0.8447
	EBAAT4-5877	$(1+4p)/8p$	$p=11$	0.8447
	ENJRPD-5877	$(1+4p)/8p$	$p=11$	0.845
	ERKVGZ-5872	$(1+4p)/8p$	$p=11$	0.8447
	FDX37Y-5877	N/A	N/A	0.8459
	GDT3MA-5872	$(1+4p)/8p$	$p=11$	0.844
	GU22R8-5877	$(1+4p)/8p$	$p=11$	0.8447
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=11 C=12$	0.844732526
H9TEJ8-5872	$(1+4p)/8p$	$p=11$	0.8447	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D2S441	HWYZF6-5877	$(1+4p)/8p$	$p=11$	0.845
	JHJYKY-5877	$(1+4p)/8p$	$p = 11$	0.8447
	JLGFXT-5877	*	*	0.8459
	KKHW9X-5872	$(1+4p)/8p$	$p=11$	0.8447
	NBJ97Q-5872	$(1+4p)/8p$	$p=11 r=14 q=12$	0.8447
	NQDVAW-5872	$(1+4p)/8p$	$p=11$	0.8447
	P99QKY-5872	$0.5+1(4p)$	$P=11$	1.9504
	PTX3AK-5877	$(1+4p)/8p$	$p=11$	0.84473
	PU94VJ-5877	$(1+4p)/8p$	$p = 11$	0.84473
	TYCCNJ-5877	N/A	N/A	.8459
	UALBVW-5877	$(4q+1)/(8q)$	$p=11$	0.845
	URUYR6-5872	$(1+4p)/8p$	$p = 11$	0.8447
	UZLJPQ-5872	$4a+1/8a$	$a=11$	0.8447
	W7GZEM-5872	$(1+4p)/8p$	$p=11$	0.8447
	W7KMRU-5877	$(1+4p)/8p$	$p = 11$	0.84473
	WAKXNU-5877	$(1+4p)/8p$	$p=11$	0.8447
	YGVZ2-5872	$(z1/4pa)+z0$	$a=11$	0.8447
	ZEKBY9-5877	$(1+4p)/8p$	$p=11$	0.8447
	ZFX3RQ-5872	$1+4p/8p$	$p=11$	0.845

Statistical Analysis Summary of D2S441
Likelihood Ratio Mode: 0.8447

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D3S1358	33G37G-5872	$(1+4p)/8p$	$p=15$	0.9051
	39LYUM-5872	$(1+4p)/8p$	$p=15$	0.905
	3ECBR6-5877	$(1+4p)/8p$	$p=15$	0.9052
	3F8R7M-5877	$1+4p/8p$	$p=15$	0.9052
	73W8G7-5872	$(1+4p)/8p$	$p=15$	0.9052
	77PUJ3-5877	$(1+4p)/(8p)$	$p=15$	0.90519
	786NQE-5872	$(1+4p)/8p$	$P=15$	0.905
	7F4KV8-5872	$(1+4p)/8p$	$p=15$	0.905186385
	7PKXQF-5872	$(1+4p)/8p$	$p=15$	0.9051
	84E29B-5872	$(1+4p)/8p$	$p=15$	0.9051
	8MBE64-5872	$(1+4p)/8p$	$p=15$	0.9052
	9HTLAG-5877	$1+4p/8p$	$p=15$	0.905186386
	AFLNDE-5877	$(1+4p)/8p$	$p=0.3085$	0.9052
	BQVKU2-5877	*	*	0.9046
	CV64QA-5872	$4p+1/8p$	$p=15$	0.9052
	DUAZED-5877	$(1+4p)/8p$	$p=15$	0.9052
	EBAAT4-5877	$(1+4p)/8p$	$p=15$	0.9052
	ENJRPD-5877	$(1+4p)/8p$	$p=15$	0.905
	ERKVGZ-5872	$(1+4p)/8p$	$p=15$	0.9052
	FDX37Y-5877	N/A	N/A	0.9046
	GDT3MA-5872	$(1+4p)/8p$	$p=15$	0.905
	GU22R8-5877	$(1+4p)/8p$	$p=15$	0.9052
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=15 C=16$	0.905186401
H9TEJ8-5872	$(1+4p)/8p$	$p=15$	0.9052	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D3S1358	HWYZF6-5877	$(1+4p)/8p$	$p=15$	0.905
	JHJYKY-5877	$(1+4p)/8p$	$p = 15$	0.9052
	JLGFXT-5877	*	*	0.9046
	KKHW9X-5872	$(1+4p)/8p$	$p=15$	0.9052
	NBJ97Q-5872	$(1+4p)/8p$	$p=15 r=17 q=16$	0.9052
	NQDVAW-5872	$(1+4p)/8p$	$p=15$	0.9051
	P99QKY-5872	$0.5+1(4p)$	$P=15$	1.734
	PTX3AK-5877	$(1+4p)/8p$	$p=15$	0.90519
	PU94VJ-5877	$(1+4p)/8p$	$p = 15$	0.90519
	TYCCNJ-5877	N/A	N/A	.9046
	UALBVW-5877	$(4q+1)/(8q)$	$p=15$	0.905
	URUYR6-5872	$(1+4p)/8p$	$p = 15$	0.9052
	UZLJPQ-5872	$4a+1/8a$	$a=15$	0.9051
	W7GZEM-5872	$(1+4p)/8p$	$p=15$	0.9052
	W7KMRU-5877	$(1+4p)/8p$	$p = 15$	0.90519
	WAKXNU-5877	$(1+4p)/8p$	$p=15$	0.9051
	YGVZ2-5872	$(z1/4pa)+z0$	$a=15$	0.9052
	ZEKBY9-5877	$(1+4p)/8p$	$p=15$	0.9052
	ZFX3RQ-5872	$1+4p/8p$	$p=15$	0.905

Statistical Analysis Summary of D3S1358
Likelihood Ratio Mode: 0.9052

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D5S818	33G37G-5872	$(1+4t)/8t$	$t=12$	0.8393
	39LYUM-5872	$(1+4p)/8p$	$p=12$	0.839
	3ECBR6-5877	$(1+4p)/8p$	$p=12$	0.8393
	3F8R7M-5877	$1+4p/8p$	$p=12$	0.8393
	73W8G7-5872	$(1+4p)/8p$	$p=12$	0.8393
	77PUJ3-5877	$(1+4p)/(8p)$	$p=12$	0.83931
	786NQE-5872	$(1+4p)/8p$	$P=12$	0.839
	7F4KV8-5872	$(1+4p)/8p$	$p=12$	0.839305103
	7PKXQF-5872	$(1+4t)/8t$	$t=12$	0.8393
	84E29B-5872	$(1+4t)/8t$	$t=12$	0.8393
	8MBE64-5872	$(1+4p)/8p$	$p=12$	0.8393
	9HTLAG-5877	$1+4p/8p$	$p=12$	0.839305103
	AFLNDE-5877	$(1+4t)/8t$	$t=0.3684$	0.8393
	BQVKU2-5877	*	*	0.8406
	CV64QA-5872	$4p+1/8p$	$p=12$	0.8393
	DUAZED-5877	$(1+4p)/8p$	$p=12$	0.8393
	EBAAT4-5877	$(1+4p)/8p$	$p=12$	0.8393
	ENJRPD-5877	$(1+4p)/8p$	$p=12$.839
	ERKVGZ-5872	$(1+4p)/8p$	$p=12$	0.8393
	FDX37Y-5877	N/A	N/A	0.8406
	GDT3MA-5872	$(1+4p)/8p$	$p=12$	0.839
	GU22R8-5877	$(1+4p)/8p$	$p=12$	0.8393
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=12 C=8$	0.839305083
H9TEJ8-5872	$(1+4p)/8p$	$p=12$	0.8393	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D5S818	HWYZF6-5877	$(1+4p)/8p$	$p=12$	0.839
	JHJYKY-5877	$(1+4p)/8p$	$p = 12$	0.8393
	JLGFXT-5877	*	*	0.8406
	KKHW9X-5872	$(1+4p)/8p$	$p=12$	0.8393
	NBJ97Q-5872	$(1+4p)/8p$	$p=12$ $q=14$ $r=8$	0.8393
	NQDVAW-5872	$(1+4p)/8p$	$p=12$	0.8393
	P99QKY-5872	$0.5+1(4p)$	$P=12$	1.9736
	PTX3AK-5877	$(1+4p)/8p$	$p=12$	0.83931
	PU94VJ-5877	$(1+4p)/8p$	$p = 12$	0.83931
	TYCCNJ-5877	N/A	N/A	.8406
	UALBVW-5877	$(4q+1)/(8q)$	$q=12$	0.839
	URUYR6-5872	$(1+4p)/8p$	$p = 12$	0.8393
	UZLJPQ-5872	$4a+1/8a$	$a=12$	0.8393
	W7GZEM-5872	$(1+4q)/8q$	$q=12$	0.8393
	W7KMRU-5877	$(1+4p)/8p$	$p = 12$	0.83931
	WAKXNU-5877	$(1+4p)/8p$	$p=12$	0.8393
	YGVZ2-5872	$(z1/4pa)+z0$	$a=12$	0.8393
	ZEKBY9-5877	$(1+4p)/8p$	$p=12$	0.8393
	ZFX3RQ-5872	$1+4p/8p$	$p=12$	0.839

Statistical Analysis Summary of D5S818
Likelihood Ratio Mode: 0.8393

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D7S820	33G37G-5872	$(1+2p)/4p$	$p=10$	1.2433
	39LYUM-5872	$(2+4p)/8p$	$p=10$	1.243
	3ECBR6-5877	$(1+2p)/4p$	$p=10$	1.243
	3F8R7M-5877	$1+2p/4p$	$p=10$	1.2434
	73W8G7-5872	$(1+2p)/4p$	$p=10$	1.243
	77PJU3-5877	$(1+2p)/(4p)$	$p=10$	1.2434
	786NQE-5872	$(1+2p)/4p$	$P=10$	1.243
	7F4KV8-5872	$(1+2p)/4p$	$p=10$	1.243383883
	7PKXQF-5872	$(1+2p)/4p$	$p=10$	1.2433
	84E29B-5872	$(1+2p)/4p$	$p=10$	1.2433
	8MBE64-5872	$(1+2p)/4p$	$p=10$	1.2434
	9HTLAG-5877	$1+2p/4p$	$p=10$	1.243383883
	AFLNDE-5877	$(1+2p)/4p$	$p=0.3363$	1.2434
	BQVKU2-5877	*	*	1.223
	CV64QA-5872	$2p+1/4p$	$p=10$	1.2434
	DUAZED-5877	$(1+2p)/4p$	$p=10$	1.2434
	EBAAT4-5877	$(1+2p)/4p$	$p=10$	1.2434
	ENJRPD-5877	$(1+2p)/4p$	$p=10$	1.24
	ERKVGZ-5872	$(1+2p)/4p$	$p=10$	1.2434
	FDX37Y-5877	N/A	N/A	1.223
	GDT3MA-5872	$(1+2p)/4p$	$p=10$	1.243
	GU22R8-5877	$(1+2p)/4p$	$p=10$	1.243
	GW36G9-5872	$H0:A*0,25+(A^2)*0,5H1:A^2$	$A=10$	1.2433839
H9TEJ8-5872	$(1+2p)/4p$	$p=10$	1.2434	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D7S820	HWYZF6-5877	$R = a(k_1) + a^*a(k_0), U = a^*a, LR = R/U$	$a = 10, k_0 = 0.5, k_1 = 0.25$	1.243
	JHJYKY-5877	$(1 + 2p)/4p$	$p = 10$	1.2434
	JLGFXT-5877	*	*	1.223
	KKHW9X-5872	$(1 + 2p)/4p$	$p = 10$	1.2434
	NBJ97Q-5872	$(1 + 2p)/4p$	$p = 10, q = 11$	1.243
	NQDVAW-5872	$(1 + 2p)/4p$	$p = 10$	1.2433
	P99QKY-5872	$0.5 + 1(4p)$	$P = 10$	1.8452
	PTX3AK-5877	$(1 + 2p)/4p$	$p = 10$	1.2434
	PU94VJ-5877	$(1 + 2p)/4p$	$p = 10$	1.2434
	TYCCNJ-5877	N/A	N/A	1.223
	UALBVW-5877	$(2p + 1)/(4p)$	$p = 10$	1.243
	URUYR6-5872	$(1 + 2p)/4p$	$p = 10$	1.243
	UZLJPQ-5872	$2a + 1/4a$	$a = 10$	1.2433
	W7GZEM-5872	$(1 + 2p)/4p$	$p = 10$	1.2434
	W7KMRU-5877	$(1 + 2p)/4p$	$p = 10$	1.2434
	WAKXNU-5877	$(1 + 2p)/4p$	$p = 10$	1.243
	YGVZ2-5872	$(z_1/2pa) + z_0$	$a = 10$	1.243
	ZEKBY9-5877	$(1 + 2p)/4p$	$p = 10$	1.2434
	ZFX3RQ-5872	$1 + 2p/4p$	$p = 10$	1.243

Statistical Analysis Summary of D7S820
Likelihood Ratio Mode: 1.2434

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D8S1179	33G37G-5872	$(1+4s)/8s$	$s=14$	0.9253
	39LYUM-5872	$(1+4p)/8p$	$p=14$	0.925
	3ECBR6-5877	$(1+4p)/8p$	$p=14$	0.9253
	3F8R7M-5877	$1+4q/8q$	$q=14$	0.9253
	73W8G7-5872	$(1+4p)/8p$	$p=14$	0.9253
	77PUJ3-5877	$(1+4p)/(8p)$	$p=14$	0.92531
	786NQE-5872	$(1+4p)/8p$	$P=14$	0.925
	7F4KV8-5872	$(1+4p)/8p$	$p=14$	0.925314732
	7PKXQF-5872	$(1+4s)/8s$	$s=14$	0.9253
	84E29B-5872	$(1+4s)/8s$	$s=14$	0.9253
	8MBE64-5872	$(1+4p)/8p$	$p=14$	0.9253
	9HTLAG-5877	$1+4p/8p$	$p=14$	0.925314733
	AFLNDE-5877	$(1+4s)/8s$	$s=0.2939$	0.9253
	BQVKU2-5877	*	*	0.9241
	CV64QA-5872	$4p+1/8p$	$p=14$	0.9253
	DUAZED-5877	$(1+4q)/8q$	$q=14$	0.9253
	EBAAT4-5877	$(1+4p)/8p$	$p=14$	0.9253
	ENJRPD-5877	$(1+4p)/8p$	$p=14$	0.925
	ERKVGZ-5872	$(1+4p)/8p$	$p=14$	0.9253
	FDX37Y-5877	N/A	N/A	0.9241
	GDT3MA-5872	$(1+4p)/8p$	$p=14$	0.925
	GU22R8-5877	$(1+4p)/8p$	$p=14$	0.9253
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=14 C=13$	0.925314699
H9TEJ8-5872	$(1+4p)/8p$	$p=14$	0.9253	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D8S1179	HWYZF6-5877	$(1+4p)/8p$	$p=14$	0.925
	JHJYKY-5877	$(1+4q)/8q$	$q = 14$	0.9253
	JLGFXT-5877	*	*	0.9241
	KKHW9X-5872	$(1+4q)/8q$	$q=14$	0.9253
	NBJ97Q-5872	$(1+4r)/8r$	$p=11 r=14 q=13$	0.9253
	NQDVAW-5872	$(1+4p)/8p$	$p=14$	0.9253
	P99QKY-5872	$0.5+1(4p)$	$P=14$	1.6756
	PTX3AK-5877	$(1+4p)/8p$	$p=14$	0.92531
	PU94VJ-5877	$(1+4p)/8p$	$p = 14$	0.92531
	TYCCNJ-5877	N/A	N/A	.9241
	UALBVW-5877	$(4q+1)/(8q)$	$q=14$	0.925
	URUYR6-5872	$(1+4p)/8p$	$p = 14$	0.9253
	UZLJPQ-5872	$4a+1/8a$	$a=14$	0.9253
	W7GZEM-5872	$(1+4a)/8a$	$a=14$	0.9253
	W7KMRU-5877	$(1+4p)/8p$	$p = 14$	0.92531
	WAKXNU-5877	$(1+4p)/8p$	$p=14$	0.9253
	YGVZ2-5872	$(z1/4pa)+z0$	$a=14$	0.9253
	ZEKBY9-5877	$(1+4p)/8p$	$p=14$	0.9253
	ZFX3RQ-5872	$1+4p/8p$	$p=14$	0.925

Statistical Analysis Summary of D8S1179
Likelihood Ratio Mode: 0.9253

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D10S1248	33G37G-5872	0.5		0.5000
	39LYUM-5872	1/2		0.5
	3ECBR6-5877	2/4	N/A	0.5000
	3F8R7M-5877			0.5000
	73W8G7-5872	1/2		0.5000
	77PUJ3-5877	1/2	N/A	0.50000
	786NQE-5872	2/4		0.500
	7F4KV8-5872	2/4		0.5
	7PKXQF-5872	0.5		0.5000
	84E29B-5872	1/2		0.5000
	8MBE64-5872	2/4		0.5
	9HTLAG-5877	2/4	-	0.5
	AFLNDE-5877	1/2		0.5000
	BQVKU2-5877	*	*	0.5000
	CV64QA-5872	1/2		0.5
	DUAZED-5877	1/2		0.5000
	EBAAT4-5877	1/2		0.5000
	ENJRPD-5877	1/2	NA	0.5
	ERKVGZ-5872	2/4	Not applicable	0.5000
	FDX37Y-5877	N/A	N/A	0.5000
	GDT3MA-5872	1/2	-	0.5
	GU22R8-5877	0.5		0.5000
	GW36G9-5872	HO:C*DH1:2*C*D	C=13 D=14	0.5
	H9TEJ8-5872	1/2		0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D10S1248	HWYZF6-5877	$R=2cd(k0), U=2cd, LR=R/U$	$c=13, d=14, k0=0.5$	0.5
	JHJYKY-5877	1/2		0.5000
	JLGFXT-5877	*	*	0.5000
	KKHW9X-5872	1/2		0.5000
	NBJ97Q-5872	1/2	$r=16, s=17, p=13, q=14$	0.5000
	NQDVAW-5872	1/2	0.5	0.5000
	P99QKY-5872	0.5		0.5
	PTX3AK-5877	2/4	N/A	0.5
	PU94VJ-5877	1/2		0.5
	TYCCNJ-5877	N/A	N/A	.5000
	UALBVV-5877	1/2	/	0.500
	URUYR6-5872	0.5		0.5
	UZLJPQ-5872	$ab/2ab=1/2$	$a=13 \text{ or } 14 \text{ or } 16 \text{ or } 17, b=13 \text{ or } 14 \text{ or } 16 \text{ or } 17$	0.5
	W7GZEM-5872	1/2		0.5
	W7KMRU-5877	1/2		0.50000
	WAKXNU-5877	1/2		0.5000
	YGVZR2-5872	Z0	Z0	0.5000
	ZEKBY9-5877	2/4		0.5000
	ZFX3RQ-5872	1/2		0.5

Statistical Analysis Summary of D10S1248
Likelihood Ratio Mode: 0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D12S391	33G37G-5872	$(1+4r)/8r$	$r=18$	0.9942
	39LYUM-5872	$(1+4p)/8p$	$p=18$	0.994
	3ECBR6-5877	$(1+4p)/8p$	$p=18$	0.9943
	3F8R7M-5877	$1+4q/8q$	$q=18$	0.9943
	73W8G7-5872	$(1+4p)/8p$	$p=18$	0.9943
	77PJU3-5877	$(1+4p)/(8p)$	$p=18$	0.99427
	786NQE-5872	$(1+4p)/8p$	$P=18$	0.994
	7F4KV8-5872	$(1+4p)/8p$	$p=18$	0.994266508
	7PKXQF-5872	$(1+4r)/8r$	$r=18$	0.9942
	84E29B-5872	$(1+4r)/8r$	$r=18$	0.9942
	8MBE64-5872	$(1+4p)/8p$	$p=18$	0.9943
	9HTLAG-5877	$1+4p/8p$	$p=18$	0.994266509
	AFLNDE-5877	$(1+4r)/8r$	$r=0.2529$	0.9943
	CV64QA-5872	$4p+1/8p$	$p=18$	0.9943
	DUAZED-5877	$(1+4q)/8q$	$q=18$	0.9943
	EBAAT4-5877	$(1+4p)/8p$	$p=18$	0.9943
	ENJRPD-5877	$(1+4p)/8p$	$p=18$.994
	GDT3MA-5872	$(1+4p)/8p$	$p=18$	0.994
	GU22R8-5877	$(1+4p)/8p$	$p=18$	0.9943
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=19 C=17$	0.994266498
	H9TEJ8-5872	$(1+4p)/8p$	$p=18$	0.9943
	HWYZF6-5877	$(1+4p)/8p$	$p=18$	0.994
	JHJYKY-5877	$(1+4q)/8q$	$q=18$	0.9943
	KKHW9X-5872	$(1+4q)/8q$	$q=18$	0.9943

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D12S391	NBJ97Q-5872	$(1+4r)/8r$	p=16 r=18 q=17	0.9943
	NQDVAW-5872	$(1+4p)/8p$	p=18	0.9942
	P99QKY-5872	$0.5+1(4p)$	P=18	1.5116
	PTX3AK-5877	$(1+4p)/8p$	p=18	0.99427
	PU94VJ-5877	$(1+4p)/8p$	p = 18	0.99427
	UALBVW-5877	$(4q+1)/(8q)$	q=18	0.994
	URUYR6-5872	$(1+4p)/8p$	p = 18	0.9943
	UZLJPQ-5872	$4a+1/8a$	a=18	0.9942
	W7GZEM-5872	$(1+4a)/8a$	a=18	0.9943
	W7KMRU-5877	$(1+4p)/8p$	p = 18	0.99427
	WAKXNU-5877	$(1+4p)/8p$	p=18	0.9943
	YGVRZ2-5872	$(z1/4pa)+z0$	a=18	0.9943
	ZEKBY9-5877	$(1+4p)/8p$	p=18	0.9943
	ZFX3RQ-5872	$1+4p/8p$	p=18	0.994

Statistical Analysis Summary of D12S391
Likelihood Ratio Mode: 0.9943

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D13S317	33G37G-5872	0.5		0.5000
	39LYUM-5872	1/2		0.5
	3ECBR6-5877	2/4	N/A	0.5000
	3F8R7M-5877			0.5000
	73W8G7-5872	1/2		0.5000
	77PUJ3-5877	1/2	N/A	0.50000
	786NQE-5872	2/4		0.500
	7F4KV8-5872	2/4		0.5
	7PKXQF-5872	0.5		0.5000
	84E29B-5872	1/2		0.5000
	8MBE64-5872	2/4		0.5
	9HTLAG-5877	2/4	-	0.5
	AFLNDE-5877	1/2		0.5000
	BQVKU2-5877	*	*	0.5000
	CV64QA-5872	1/2		0.5
	DUAZED-5877	1/2		0.5000
	EBAAT4-5877	1/2		0.5000
	ENJRPD-5877	1/2	NA	0.5
	ERKVGZ-5872	2/4	Not applicable	0.5000
	FDX37Y-5877	N/A	N/A	0.5000
	GDT3MA-5872	1/2	-	0.5
GU22R8-5877	0.5		0.5000	
GW36G9-5872	H0:B*CH1:2*B*C	B=9 C=13	0.5	
H9TEJ8-5872	1/2		0.5000	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D13S317	HWYZF6-5877	$R=2bc(k_0), U=2bc, LR=R/U$	$b=9, c=13, k_0=0.5$	0.5
	JHJYKY-5877	1/2		0.5000
	JLGFXT-5877	*	*	0.5000
	KKHW9X-5872	1/2		0.5000
	NBJ97Q-5872	1/2	$p=12, r=9, q=13$	0.5000
	NQDVAW-5872	1/2	0.5	0.5000
	P99QKY-5872	0.5		0.5
	PTX3AK-5877	2/4	N/A	0.5
	PU94VJ-5877	1/2		0.5
	TYCCNJ-5877	N/A	N/A	0.5000
	UALBVV-5877	1/2	/	0.500
	URUYR6-5872	0.5		0.5
	UZLJPQ-5872	$1/2a^2/a^2=1/2$	$a=9 \text{ or } 12 \text{ or } 13$	0.5
	W7GZEM-5872	1/2		0.5
	W7KMRU-5877	1/2		0.50000
	WAKXNU-5877	1/2		0.5000
	YGVZR2-5872	Z0	Z0	0.5000
	ZEKBY9-5877	2/4		0.5000
	ZFX3RQ-5872	1/2		0.5

Statistical Analysis Summary of D13S317
Likelihood Ratio Mode: 0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D16S539	33G37G-5872	0.5		0.5000
	39LYUM-5872	1/2		0.5
	3ECBR6-5877	2/4	N/A	0.5000
	3F8R7M-5877			0.5000
	73W8G7-5872	1/2		0.5000
	77PJU3-5877	1/2	N/A	0.50000
	786NQE-5872	2/4		0.500
	7F4KV8-5872	2/4		0.5
	7PKXQF-5872	0.5		0.5000
	84E29B-5872	1/2		0.5000
	8MBE64-5872	2/4		0.5
	9HTLAG-5877	2/4	-	0.5
	AFLNDE-5877	1/2		0.5000
	BQVKU2-5877	*	*	0.5000
	CV64QA-5872	1/2		0.5
	DUAZED-5877	1/2		0.5000
	EBAAT4-5877	1/2		0.5000
	ENJRPD-5877	1/2	NA	0.5
	ERKVGZ-5872	2/4	Not applicable	0.5000
	FDX37Y-5877	N/A	N/A	0.5000
	GDT3MA-5872	1/2	-	0.5
	GU22R8-5877	0.5		0.5000
GW36G9-5872	H0:B*CH1:2*B*C	B=11 C=12	0.5	
H9TEJ8-5872	1/2		0.5000	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D16S539	HWYZF6-5877	$R=2bc(k0), U=2bc, LR=R/U$	b=11, c= 12, k0= 0.5	0.5
	JHJYKY-5877	1/2		0.5000
	JLGFXT-5877	*	*	0.5000
	KKHW9X-5872	1/2		0.5000
	NBJ97Q-5872	1/2	r=9 p=11 q=12	0.5000
	NQDVAW-5872	1/2	0.5	0.5000
	P99QKY-5872	0.5		0.5
	PTX3AK-5877	2/4	N/A	0.5
	PU94VJ-5877	1/2		0.5
	TYCCNJ-5877	N/A	N/A	0.5000
	UALBVV-5877	1/2	/	0.500
	URUYR6-5872	0.5		0.5
	UZLJPQ-5872	$1/2a^2/a^2=1/2$	a=9 or 11 or 12	0.5
	W7GZEM-5872	1/2		0.5
	W7KMRU-5877	1/2		0.50000
	WAKXNU-5877	1/2		0.5000
	YGVRZ2-5872	Z0	Z0	0.5000
	ZEKBY9-5877	2/4		0.5000
	ZFX3RQ-5872	1/2		0.5

Statistical Analysis Summary of D16S539
Likelihood Ratio Mode: 0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D18S51	33G37G-5872	$(1 + 4x)/8x$	$x=20$	2.4872
	39LYUM-5872	$(1 + 4p)/8p$	$p=20$	2.487
	3ECBR6-5877	$(1 + 4p)/8p$	$p=20$	2.487
	3F8R7M-5877	$1 + 4q/8q$	$q=20$	2.4873
	73W8G7-5872	$(1 + 4p)/8p$	$p = 20$	2.487
	77PJU3-5877	$(1 + 4p)/(8p)$	$p = 20$	2.4873
	786NQE-5872	$(1 + 4p)/8p$	$P=20$	2.487
	7F4KV8-5872	$(1 + 4p)/8p$	$p = 20$	2.487281399
	7PKXQF-5872	$(1 + 4x)/8x$	$x=20$	2.4872
	84E29B-5872	$(1 + 4x)/8x$	$x=20$	2.4872
	8MBE64-5872	$(1 + 4p)/8p$	$p = 20$	2.4873
	9HTLAG-5877	$1 + 4p/8p$	$p=20$	2.487281399
	AFLNDE-5877	$(1 + 4x)/8x$	$x=0.0629$	2.4873
	BQVKU2-5877	*	*	2.265
	CV64QA-5872	$4p + 1/8p$	$p=20$	2.4873
	DUAZED-5877	$(1 + 4q)/8q$	$q=20$	2.4873
	EBAAT4-5877	$(1 + 4p)/8p$	$p=20$	2.4873
	ENJRPD-5877	$(1 + 4p)/8p$	$p=20$	2.49
	ERKVGZ-5872	$(1 + 4p)/8p$	$p = 20$	2.4873
	FDX37Y-5877	N/A	N/A	2.265
	GDT3MA-5872	$(1 + 4p)/8p$	$p = 20$	2.487
	GU22R8-5877	$(1 + 4p)/8p$	$p=20$	2.487
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=20 C=15$	2.487281329
H9TEJ8-5872	$(1 + 4p)/8p$	$p=20$	2.4873	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D18S51	HWYZF6-5877	$(1+4p)/8p$	$p=20$	2.487
	JHJYKY-5877	$(1+4q)/8q$	$q = 20$	2.4873
	JLGFXT-5877	*	*	2.265
	KKHW9X-5872	$(1+4q)/8q$	$q=20$	2.4873
	NBJ97Q-5872	$(1+4r)/8r$	$p=12 r=20 q=15$	2.487
	NQDVAV-5872	$(1+4p)/8p$	$p=20$	2.4872
	P99QKY-5872	$0.5+1(4p)$	$P=20$	0.7516
	PTX3AK-5877	$(1+4p)/8p$	$p=20$	2.4873
	PU94VJ-5877	$(1+4p)/8p$	$p = 20$	2.4873
	TYCCNJ-5877	N/A	N/A	2.265
	UALBVV-5877	$(4q+1)/(8q)$	$q=20$	2.487
	URUYR6-5872	$(1+4p)/8p$	$p = 20$	2.487
	UZLJPQ-5872	$4a+1/8a$	$a=20$	2.4872
	W7GZEM-5872	$(1+4a)/8a$	$a=20$	2.4873
	W7KMRU-5877	$(1+4p)/8p$	$p = 20$	2.4873
	WAKXNU-5877	$(1+4p)/8p$	$p=20$	2.487
	YGVZ2-5872	$(z1/4pa)+z0$	$a=20$	2.487
	ZEKBY9-5877	$(1+4p)/8p$	$p=20$	2.4873
	ZFX3RQ-5872	$1+4p/8p$	$p=20$	2.487

Statistical Analysis Summary of D18S51
Likelihood Ratio Mode: 2.4873

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D19S433	33G37G-5872	0.5		0.5000
	39LYUM-5872	1/2		0.5
	3ECBR6-5877	2/4	N/A	0.5000
	3F8R7M-5877			0.5000
	73W8G7-5872	1/2		0.5000
	77PUJ3-5877	1/2	N/A	0.50000
	786NQE-5872	2/4		0.500
	7F4KV8-5872	2/4		0.5
	7PKXQF-5872	0.5		0.5000
	84E29B-5872	1/2		0.5000
	8MBE64-5872	2/4		0.5
	9HTLAG-5877	2/4	-	0.5
	AFLNDE-5877	1/2		0.5000
	BQVKU2-5877	*	*	0.5000
	CV64QA-5872	1/2		0.5
	DUAZED-5877	1/2		0.5000
	EBAAT4-5877	1/2		0.5000
	ENJRPD-5877	1/2	NA	0.5
	ERKVGZ-5872	2/4	Not applicable	0.5000
	FDX37Y-5877	N/A	N/A	0.5000
	GDT3MA-5872	1/2	-	0.5
	GU22R8-5877	0.5		0.5000
GW36G9-5872	HO:C*DH1:2*C*D	C=11 D=13.2	0.5	
H9TEJ8-5872	1/2		0.5000	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D19S433	HWYZF6-5877	$R=2cd(k0), U=2cd, LR=R/U$	$c=11, d=13.2, k0=0.5$	0.5
	JHJYKY-5877	1/2		0.5000
	JLGFXT-5877	*	*	0.5000
	KKHW9X-5872	1/2		0.5000
	NBJ97Q-5872	1/2	$q=13, s=15.2, p=11, r=13.2$	0.5000
	NQDVAW-5872	1/2	0.5	0.5000
	P99QKY-5872	0.5		0.5
	PTX3AK-5877	2/4	N/A	0.5
	PU94VJ-5877	1/2		0.5
	TYCCNJ-5877	N/A	N/A	.5000
	UALBVV-5877	1/2	/	0.500
	URUYR6-5872	0.5		0.5
	UZLJPQ-5872	$ab/2ab=1/2$	$a=11 \text{ or } 13 \text{ or } 13.2 \text{ or } 15.2, b=11 \text{ or } 13 \text{ or } 13.2 \text{ or } 15.2$	0.5
	W7GZEM-5872	1/2		0.5
	W7KMRU-5877	1/2		0.50000
	WAKXNU-5877	1/2		0.5000
	YGVZR2-5872	Z0	Z0	0.5000
	ZEKBY9-5877	2/4		0.5000
	ZFX3RQ-5872	1/2		0.5

Statistical Analysis Summary of D19S433
Likelihood Ratio Mode: 0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D21S11	33G37G-5872	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.6196
	39LYUM-5872	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.620
	3ECBR6-5877	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.620
	3F8R7M-5877	$p+q+4pq/8pq$	$p=28 \ q=29$	1.6196
	73W8G7-5872	$(p+q+4pq)/8pq$	$p = 28 \ q = 29$	1.620
	77PJU3-5877	$(p+q+4pq)/(8pq)$	$p = 28 \ q = 29$	1.6196
	786NQE-5872	$(p+q+4pq)/8pq$	$P=28 \ q=29$	1.620
	7F4KV8-5872	$(p+q+4pq)/8pq$	$p = 28 \ q = 29$	1.619607386
	7PKXQF-5872	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.6196
	84E29B-5872	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.6196
	8MBE64-5872	$(p+q+4pq)/8pq$	$p = 28 \ q = 29$	1.6196
	9HTLAG-5877	$p+q+4pq/8pq$	$p=28 \ q=29$	1.619607386
	AFLNDE-5877	$(p+q+4pq)/8pq$	$p=0.2456 \ q=0.2047$	1.6196
	BQVKU2-5877	*	*	1.604
	CV64QA-5872	$p+q+4pq/8pq$	$p=28 \ q=29$	1.6196
	DUAZED-5877	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.6196
	EBAAT4-5877	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.6196
	ENJRPD-5877	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.62
	ERKVGZ-5872	$(p+q+4pq)/8pq$	$p = 28 \ q = 29$	1.6196
	FDX37Y-5877	N/A	N/A	1.604
	GDT3MA-5872	$(p+q+4pq)/8pq$	$p = 28 \ q = 29$	1.619
	GU22R8-5877	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.620
	GW36G9-5872	$H00,5+B*0,25+A*0,25+A*BH$ $1:2*A*B$	$A=28 \ B=29$	1.619607407
H9TEJ8-5872	$(p+q+4pq)/8pq$	$p=28 \ q=29$	1.6196	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D21S11	HWYZF6-5877	$(p+q+4pq)/8pq$	$p=28, q=29$	1.620
	JHJYKY-5877	$(p+q+4pq)/8pq$	$p = 28, q = 29$	1.6196
	JLGFXT-5877	*	*	1.604
	KKHW9X-5872	$(p+q+4pq)/8pq$	$p=28, q=29$	1.6196
	NBJ97Q-5872	$(p+q+4pq)/8pq$	$p=28, q=29$	1.620
	NQDVAW-5872	$(p+q+4pq)/8pq$	$p=28, q=29$	1.6196
	P99QKY-5872	$0.5+(p+q)/(8pq)$	$p=28, q=29$	1.619607386
	PTX3AK-5877	$(p+q+4pq)/8pq$	$p=28, q=29$	1.6196
	PU94VJ-5877	$(p+q+4pq)/8pq$	$p = 28, q = 29$	1.6196
	TYCCNJ-5877	N/A	N/A	1.604
	UALBVW-5877	$(4pq+p+q)/(8pq)$	$p=28, q=29$	1.620
	URUYR6-5872	$(p+q+4pq)/8pq$	$p = 28, q = 29$	1.62
	UZLJPQ-5872	$a+b+4ab/8ab$	$a=28, b=29$	1.6196
	W7GZEM-5872	$(p+q+4pq)/8pq$	$p=28, q=29$	1.6196
	W7KMRU-5877	$(p+q+4pq)/8pq$	$p = 28, q = 29$	1.6196
	WAKXNU-5877	$(p+q+4pq)/8pq$	$p=28, q=29$	1.619
	YGVZ2-5872	$(2z^2+z^1(pa+pb)/4pab)+Z0$	$a=28, b=29$	1.620
	ZEKBY9-5877	$(p+q+4pq)/8pq$	$p=28, q=29$	1.6196
	ZFX3RQ-5872	$p+q+4pq/8pq$	$p=28, q=29$	1.62

Statistical Analysis Summary of D21S11
Likelihood Ratio Mode: 1.6196

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D22S1045	33G37G-5872	$(1+4t)/8t$	$t=16$	1.1527
	39LYUM-5872	$(1+4p)/8p$	$p=16$	1.153
	3ECBR6-5877	$(1+4p)/8p$	$p=16$	1.153
	3F8R7M-5877	$1+4q/8q$	$q=16$	1.1527
	73W8G7-5872	$(1+4p)/8p$	$p=16$	1.153
	77PUJ3-5877	$(1+4p)/(8p)$	$p=16$	1.1527
	786NQE-5872	$(1+4p)/8p$	$P=16$	1.153
	7F4KV8-5872	$(1+4p)/8p$	$p=16$	1.152741514
	7PKXQF-5872	$(1+4t)/8t$	$t=16$	1.1527
	84E29B-5872	$(1+4t)/8t$	$t=16$	1.1527
	8MBE64-5872	$(1+4p)/8p$	$p=16$	1.1527
	9HTLAG-5877	$1+4p/8p$	$p=16$	1.152741514
	AFLNDE-5877	$(1+4t)/8t$	$t=0.1915$	1.1527
	BQVKU2-5877	*	*	1.139
	CV64QA-5872	$4p+1/8p$	$p=16$	1.1527
	DUAZED-5877	$(1+4q)/8q$	$q=16$	1.1527
	EBAAT4-5877	$(1+4p)/8p$	$p=16$	1.1527
	ENJRPD-5877	$(1+4p)/8p$	$p=16$	1.15
	ERKVGZ-5872	$(1+4p)/8p$	$p=16$	1.1527
	FDX37Y-5877	N/A	N/A	1.139
	GDT3MA-5872	$(1+4p)/8p$	$p=16$	1.152
	GU22R8-5877	$(1+4p)/8p$	$p=16$	1.153
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=16 C=15$	1.152741518
H9TEJ8-5872	$(1+4p)/8p$	$p=16$	1.1527	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
D22S1045	HWYZF6-5877	$(1+4p)/8p$	$p=16$	1.153
	JHJYKY-5877	$(1+4q)/8q$	$q = 16$	1.1527
	JLGFXT-5877	*	*	1.139
	KKHW9X-5872	$(1+4q)/8q$	$q=16$	1.1527
	NBJ97Q-5872	$(1+4r)/8r$	$p=12 r=16 q=15$	1.153
	NQDVAW-5872	$(1+4p)/8p$	$p=16$	1.1527
	P99QKY-5872	$0.5+1(4p)$	$p=16$	1.266
	PTX3AK-5877	$(1+4p)/8p$	$p=16$	1.1527
	PU94VJ-5877	$(1+4p)/8p$	$p = 16$	1.1527
	TYCCNJ-5877	N/A	N/A	1.139
	UALBVW-5877	$(4q+1)/(8q)$	$q=16$	1.153
	URUYR6-5872	$(1+4p)/8p$	$p = 16$	1.153
	UZLJPQ-5872	$4a+1/8a$	$a=16$	1.1527
	W7GZEM-5872	$(1+4a)/8a$	$a=16$	1.1527
	W7KMRU-5877	$(1+4p)/8p$	$p = 16$	1.1527
	WAKXNU-5877	$(1+4p)/8p$	$p=16$	1.153
	YGVZ2-5872	$(z1/4pa)+z0$	$a=16$	1.153
	ZEKBY9-5877	$(1+4p)/8p$	$p=16$	1.1527
	ZFX3RQ-5872	$1+4p/8p$	$p=16$	1.153

Statistical Analysis Summary of D22S1045
Likelihood Ratio Mode: 1.1527

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
CSF1PO	33G37G-5872	$(1+4r)/8r$	$r=12$	0.9232
	39LYUM-5872	$(1+4p)/8p$	$p=12$	0.923
	3ECBR6-5877	$(1+4p)/8p$	$p=12$	0.9233
	3F8R7M-5877	$1+4q/8q$	$q=12$	0.9233
	73W8G7-5872	$(1+4p)/8p$	$p=12$	0.9233
	77PJU3-5877	$(1+4p)/(8p)$	$p=12$	0.92330
	786NQE-5872	$(1+4p)/8p$	$P=12$	0.923
	7F4KV8-5872	$(1+4p)/8p$	$p=12$	0.923298340
	7PKXQF-5872	$(1+4r)/8r$	$r=12$	0.9232
	84E29B-5872	$(1+4r)/8r$	$r=12$	0.9232
	8MBE64-5872	$(1+4p)/8p$	$p=12$	0.9233
	9HTLAG-5877	$1+4p/8p$	$p=12$	0.923298341
	AFLNDE-5877	$(1+4r)/8r$	$r=0.2953$	0.9233
	BQVKU2-5877	*	*	0.9220
	CV64QA-5872	$4p+1/8p$	$p=12$	0.9233
	DUAZED-5877	$(1+4q)/8q$	$q=12$	0.9233
	EBAAT4-5877	$(1+4p)/8p$	$p=12$	0.9233
	ENJRPD-5877	$(1+4p)/8p$	$p=12$	0.923
	ERKVGZ-5872	$(1+4p)/8p$	$p=12$	0.9233
	FDX37Y-5877	N/A	N/A	0.9220
	GDT3MA-5872	$(1+4p)/8p$	$p=12$	0.923
	GU22R8-5877	$(1+4p)/8p$	$p=12$	0.9233
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=12 C=10$	0.923298331
H9TEJ8-5872	$(1+4p)/8p$	$p=12$	0.9233	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
CSF1PO	HWYZF6-5877	$(1+4p)/8p$	$p=12$	0.923
	JHJYKY-5877	$(1+4q)/8q$	$q = 12$	0.9233
	JLGFXT-5877	*	*	0.9220
	KKHW9X-5872	$(1+4q)/8q$	$q=12$	0.9233
	NBJ97Q-5872	$(1+4r)/8r$	$q=11 r=12 p=10$	0.9233
	NQDVAW-5872	$(1+4p)/8p$	$p=12$	0.9232
	P99QKY-5872	$0.5+1(4p)$	$p=12$	1.6812
	PTX3AK-5877	$(1+4p)/8p$	$p=12$	0.92330
	PU94VJ-5877	$(1+4p)/8p$	$p = 12$	0.92330
	TYCCNJ-5877	N/A	N/A	.9220
	UALBVW-5877	$(4q+1)/(8q)$	$q=12$	0.923
	URUYR6-5872	$(1+4p)/8p$	$p = 12$	0.9233
	UZLJPQ-5872	$4a+1/8a$	$a=12$	0.9232
	W7GZEM-5872	$(1+4a)/8a$	$a=12$	0.9233
	W7KMRU-5877	$(1+4p)/8p$	$p = 12$	0.92330
	WAKXNU-5877	$(1+4p)/8p$	$p=12$	0.9233
	YGVZ2-5872	$(z1/4pa)+z0$	$a=12$	0.9233
	ZEKBY9-5877	$(1+4p)/8p$	$p=12$	0.9233
	ZFX3RQ-5872	$1+4p/8p$	$p=12$	0.923

Statistical Analysis Summary of CSF1PO
Likelihood Ratio Mode: 0.9233

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
FGA	33G37G-5872	$(1+2a)/4a$	$a=23$	1.9740
	39LYUM-5872	$(2+4p)/8p$	$p=23$	1.974
	3ECBR6-5877	$(1+2p)/4p$	$p=23$	1.974
	3F8R7M-5877	$1+2p/4p$	$p=23$	1.9741
	73W8G7-5872	$(1+2p)/4p$	$p = 23$	1.974
	77PJU3-5877	$(1+2p)/(4p)$	$p = 23$	1.9741
	786NQE-5872	$(1+2p)/4p$	$P=23$	1.974
	7F4KV8-5872	$(1+2p)/4p$	$p = 23$	1.974056604
	7PKXQF-5872	$(1+2a)/4a$	$a=23$	1.9740
	84E29B-5872	$(1+2a)/4a$	$a=23$	1.9740
	8MBE64-5872	$(1+2p)/4p$	$p = 23$	1.9741
	9HTLAG-5877	$1+2p/4p$	$p=23$	1.974056604
	AFLNDE-5877	$(1+2a)/4a$	$a=0.1696$	1.9741
	BQVKU2-5877	*	*	1.858
	CV64QA-5872	$2p+1/4p$	$p=23$	1.9741
	DUAZED-5877	$(1+2p)/4p$	$p=23$	1.9741
	EBAAT4-5877	$(1+2p)/4p$	$p=23$	1.9741
	ENJRPD-5877	$(1+2p)/4p$	$p=23$	1.97
	ERKVGZ-5872	$(1+2p)/4p$	$p = 23$	1.9741
	FDX37Y-5877	N/A	N/A	1.858
	GDT3MA-5872	$(1+2p)/4p$	$p = 23$	1.974
	GU22R8-5877	$(1+2p)/4p$	$p=23$	1.974
	GW36G9-5872	$H0:0,5*B+A*BH1:2*A*B$	$A=23 B=19,2$	1.974056501
H9TEJ8-5872	$(1+2p)/4p$	$p=23$	1.9741	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
FGA	HWYZF6-5877	$R=b(k1)+b(k1)+2ab(k0),U=2a$ $b,LR=R/U$	$a=23, b=19.2, k0=0.5, k1=0.25$	1.974
	JHJYKY-5877	$(1+2p)/4p$	$p = 23$	1.9741
	JLGFXT-5877	*	*	1.858
	KKHW9X-5872	$(1+2p)/4p$	$p=23$	1.9741
	NBJ97Q-5872	$(1+2q)/4q$	$q=23 p=19.2$	1.974
	NQDVAW-5872	$(1+2p)/4p$	$p=23$	1.9740
	P99QKY-5872	$0.5+1(4p)$	$p=23$	1.1784
	PTX3AK-5877	$(1+2p)/4p$	$p=23$	1.9741
	PU94VJ-5877	$(1+2p)/4p$	$p = 23$	1.9741
	TYCCNJ-5877	N/A	N/A	1.858
	UALBVW-5877	$(2q+1)/(4q)$	$q=23$	1.974
	URUYR6-5872	$(1+2p)/4p$	$p = 23$	1.974
	UZLJPQ-5872	$2a+1/4a$	$a=23$	1.9740
	W7GZEM-5872	$(1+2q)/4q$	$q=23$	1.9741
	W7KMRU-5877	$(1+2p)/4p$	$p = 23$	1.9741
	WAKXNU-5877	$(1+2p)/4p$	$p=23$	1.974
	YGVZ2-5872	$(z1/2pa)+z0$	$a=23$	1.974
	ZEKBY9-5877	$(1+2p)/4p$	$p=23$	1.9741
	ZFX3RQ-5872	$1+2p/4p$	$p=23$	1.974

Statistical Analysis Summary of FGA
Likelihood Ratio Mode: 1.9741

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaD	33G37G-5872	$(1+4p)/8p$	$p=2.2$	1.5964
	39LYUM-5872	$(1+4p)/8p$	$p=2.2$	1.596
	3ECBR6-5877	$(1+4p)/8p$	$p=2.2$	1.596
	3F8R7M-5877	$1+4p/8p$	$p=2.2$	1.5965
	73W8G7-5872	$(1+4p)/8p$	$p = 2.2$	1.596
	77PJU3-5877	$(1+4p)/(8p)$	$p = 2.2$	1.5965
	786NQE-5872	$(1+4p)/8p$	$P=2.2$	1.596
	7F4KV8-5872	$(1+4p)/8p$	$p = 2.2$	1.596491228
	7PKXQF-5872	$(1+4p)/8p$	$p=2.2$	1.5964
	84E29B-5872	$(1+4x)/8x$	$x=2.2$	1.5964
	8MBE64-5872	$(1+4p)/8p$	$p = 2.2$	1.5965
	9HTLAG-5877	$1+4p/8p$	$p=2.2$	1.596491228
	AFLNDE-5877	$(1+4p)/8p$	$p=0.114$	1.5965
	CV64QA-5872	$4p+1/8p$	$p=2.2$	1.5965
	DUAZED-5877	$(1+4p)/8p$	$p=2.2$	1.5965
	EBAAT4-5877	$(1+4p)/8p$	$p=2.2$	1.5965
	ENJRPD-5877	$(1+4p)/8p$	$p=2.2$	1.6
	ERKVGZ-5872	$(1+4p)/8p$	$p = 2.2$	1.5965
	GDT3MA-5872	$(1+4p)/8p$	$p = 2.2$	1.596
	GU22R8-5877	$(1+4p)/8p$	$p=2.2$	1.596
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=2,2 C=13$	1.596491228
	H9TEJ8-5872	$(1+4p)/8p$	$p=2.2$	1.5965
	HWYZF6-5877	$(1+4p)/8p$	$p=2.2$	1.596
	JHJYKY-5877	$(1+4p)/8p$	$p = 2.2$	1.5964

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaD	KKHW9X-5872	$(1+4p)/8p$	$p=2.2$	1.5965
	NBJ97Q-5872	$(1+4r)/8r$	$r=2.2 \ p=10 \ q=13$	1.596
	NQDVAW-5872	$(1+4p)/8p$	$p=2.2$	1.5964
	P99QKY-5872	$0.5+1(4p)$	$p=2.2$	0.956
	PTX3AK-5877	$(1+4p)/8p$	$p=2.2$	1.5965
	PU94VJ-5877	$(1+4p)/8p$	$p = 2.2$	1.5965
	UALBVW-5877	$(4q+1)/(8q)$	$p=2.2$	1.596
	URUYR6-5872	$(1+4p)/8p$	$p = 2.2$	1.597
	UZLJPQ-5872	$4a+1/8a$	$a=2.2$	1.5964
	W7GZEM-5872	$(1+4p)/8p$	$p=2.2$	1.5965
	W7KMRU-5877	$(1+4p)/8p$	$p = 2.2$	1.5965
	WAKXNU-5877	$(1+4p)/8p$	$p=2.2$	1.596
	YGVRZ2-5872	$(z1/4pa)+z0$	$a=2.2$	1.596
	ZEKBY9-5877	$(1+4p)/8p$	$p=2.2$	1.5965
	ZFX3RQ-5872	$1+4p/8p$	$p=2.2$	1.597

Statistical Analysis Summary of PentaD
Likelihood Ratio Mode: 1.5965

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaE	33G37G-5872	0.5		0.5000
	39LYUM-5872	1/2		0.5
	3ECBR6-5877	2/4	N/A	0.5000
	3F8R7M-5877			0.5000
	73W8G7-5872	1/2		0.5000
	77PJU3-5877	1/2	N/A	0.50000
	786NQE-5872	2/4		0.500
	7F4KV8-5872	2/4		0.5
	7PKXQF-5872	0.50		0.5000
	84E29B-5872	1/2		0.5000
	8MBE64-5872	2/4		0.5
	9HTLAG-5877	2/4	-	0.5
	AFLNDE-5877	1/2		0.5000
	CV64QA-5872	1/2		0.5
	DUAZED-5877	1/2		0.5000
	EBAAT4-5877	1/2		0.5000
	ENJRPD-5877	1/2		0.5
	ERKVGZ-5872	2/4		Not applicable
	GDT3MA-5872	1/2		0.5
	GU22R8-5877	0.5		0.5000
	GW36G9-5872	HO:C*DH1:2*C*D	C=5 D=16	0.5
	H9TEJ8-5872	1/2		0.5000
	HWYZF6-5877	R=2cd(k0),U=2cd,LR=R/U	c=5, d= 16, k0=0.5	0.5
JHJYKY-5877	1/2		0.5000	

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
PentaE	KKHW9X-5872	1/2		0.5000
	NBJ97Q-5872	1/2	p=12 q=13 s=5 r=16	0.5000
	NQDVAW-5872	1/2	0.5	0.5000
	P99QKY-5872	0.5		0.5
	PTX3AK-5877	2/4	N/A	0.5
	PU94VJ-5877	1/2		0.5
	UALBVW-5877	1/2	/	0.500
	URUYR6-5872	0.5		0.5
	UZLJPQ-5872	ab/2ab=1/2	a=5 or 12 or 13 or 16 b=5 or 12 or 13 or 16	0.5
	W7GZEM-5872	1/2		0.5
	W7KMRU-5877	1/2		0.50000
	WAKXNU-5877	1/2		0.5000
	YGVZR2-5872	Z0	Z0	0.5000
	ZEKBY9-5877	2/4		0.5000
ZFX3RQ-5872	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	33G37G-5872	$(1+4a)/8a$	$p=18$	1.5425
	39LYUM-5872	$(1+4p)/8p$	$p=18$	1.543
	3ECBR6-5877	$(1+4p)/8p$	$p=18$	1.543
	3F8R7M-5877	$1+4q/8q$	$q=18$	1.5425
	73W8G7-5872	$(1+4p)/8p$	$p=18$	1.543
	77PJU3-5877	$(1+4p)/(8p)$	$p=18$	1.5425
	786NQE-5872	$(1+4p)/8p$	$P=18$	1.543
	7F4KV8-5872	$(1+4p)/8p$	$p=18$	1.542535446
	7PKXQF-5872	$(1+4a)/8a$	$a=18$	1.5425
	84E29B-5872	$(1+4a)/8a$	$a=18$	1.5425
	8MBE64-5872	$(1+4p)/8p$	$p=18$	1.5425
	9HTLAG-5877	$2/4$	-	0.5
	AFLNDE-5877	$(1+4a)/8a$	$a=0.1199$	1.5425
	BQVKU2-5877	*	*	1.492
	CV64QA-5872	$4p+1/8p$	$P=18$	1.5425
	DUAZED-5877	$(1+4q)/8q$	$q=18$	1.5425
	EBAAT4-5877	$(1+4p)/8p$	$p=18$	1.5425
	ENJRPD-5877	$(1+4p)/8p$	$p=18$	1.54
	ERKVGZ-5872	$(1+4p)/8p$	$p=18$	1.5425
	FDX37Y-5877	N/A	N/A	1.492
	GDT3MA-5872	$(1+4p)/8p$	$p=18$	1.542
	GU22R8-5877	$(1+4p)/8p$	$p=18$	1.543
	GW36G9-5872	$H0:C*0,25+A*CH1:2*A*C$	$A=18 C=34$	1.542535442
	H9TEJ8-5872	$(1+4p)/8p$	$p=18$	1.5425

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
SE33	HWYZF6-5877	$(1+4p)/8p$	$p=18$	1.543
	JHJYKY-5877	$(1+4q)/8q$	$q = 18$	1.5425
	JLGFXT-5877	*	*	1.492
	KKHW9X-5872	$(1+4q)/8q$	$q=18$	1.5425
	NBJ97Q-5872	$(1+4q)/8q$	$p=16.2 \ q=18 \ r=34$	1.543
	NQDVAW-5872	$(1+4p)/8p$	$p=18$	1.5425
	P99QKY-5872	$0.5+1(4p)$	$p=18$	0.9796
	PTX3AK-5877	$(1+4p)/8p$	$p=18$	1.5425
	PU94VJ-5877	$(1+4p)/8p$	$p = 18$	1.5425
	TYCCNJ-5877	N/A	N/A	1.492
	UALBVW-5877	$(4q+1)/(8q)$	$q=18$	1.543
	URUYR6-5872	$(1+4p)/8p$	$p = 18$	1.543
	UZLJPQ-5872	$4a+1/8a$	$a=18$	1.5425
	W7GZEM-5872	$(1+4q)/8q$	$q=18$	1.5425
	W7KMRU-5877	$(1+4p)/8p$	$p = 18$	1.5425
	WAKXNU-5877	$(1+4p)/8p$	$p=18$	1.542
	YGVZ2-5872	$(z1/4pa)+z0$	$a=18$	1.542
	ZEKBY9-5877	$(1+4p)/8p$	$p=18$	1.5425
	ZFX3RQ-5872	$1+4p/8p$	$p=18$	1.543

Statistical Analysis Summary of SE33
Likelihood Ratio Mode: 1.5425

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TH01	33G37G-5872	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.7562
	39LYUM-5872	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.756
	3ECBR6-5877	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.756
	3F8R7M-5877	$p+q+4pq/8pq$	$p=6 \ q=7$	1.7563
	73W8G7-5872	$(p+q+4pq)/8pq$	$p = 6 \ q = 7$	1.543
	77PUJ3-5877	$(p+q+4pq)/(8pq)$	$p = 6 \ q = 7$	1.7563
	786NQE-5872	$(p+q+4pq)/8pq$	$P=6 \ q=7$	1.756
	7F4KV8-5872	$(p+q+4pq)/8pq$	$p = 6 \ q = 7$	1.756295683
	7PKXQF-5872	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.7562
	84E29B-5872	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.7562
	8MBE64-5872	$(p+q+4pq)/8pq$	$p = 6 \ q = 7$	1.7563
	9HTLAG-5877	$p+q+4pq/8pq$	$p=6 \ q=7$	1.756295683
	AFLNDE-5877	$(p+q+4pq)/8pq$	$p=0.1316 \ q=0.4079$	1.7563
	BQVKU2-5877	*	*	1.717
	CV64QA-5872	$p+q+4pq/8pq$	$p=6 \ q=7$	1.7563
	DUAZED-5877	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.7563
	EBAAT4-5877	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.7563
	ENJRPD-5877	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.76
	ERKVGZ-5872	$(p+q+4pq)/8pq$	$p = 6 \ q = 7$	1.7563
	FDX37Y-5877	N/A	N/A	1.717
	GDT3MA-5872	$(p+q+4pq)/8pq$	$p = 6 \ q = 7$	1.756
	GU22R8-5877	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.756
	GW36G9-5872	$H00,5+B*0,25+A*0,25+A*BH$ $1:2*A*B$	$A=6 \ B=7$	1.75629556
	H9TEJ8-5872	$(p+q+4pq)/8pq$	$p=6 \ q=7$	1.7563

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TH01	HWYZF6-5877	$(p+q+4pq)/8pq$	$p=6, q=7$	1.756
	JHJYKY-5877	$(p+q+4pq)/8pq$	$p=6, q=7$	1.7563
	JLGFXT-5877	*	*	1.717
	KKHW9X-5872	$(p+q+4pq)/8pq$	$p=6, q=7$	1.7563
	NBJ97Q-5872	$(p+q+4pq)/8pq$	$p=6, q=7$	1.756
	NQDVAW-5872	$(p+q+4pq)/8pq$	$p=6, q=7$	1.7562
	P99QKY-5872	$0.5+(p+q)/(8pq)$	$p=6, q=7$	1.756295683
	PTX3AK-5877	$(p+q+4pq)/8pq$	$p=6, q=7$	1.7564
	PU94VJ-5877	$(p+q+4pq)/8pq$	$p=6, q=7$	1.7563
	TYCCNJ-5877	N/A	N/A	1.717
	UALBVW-5877	$(4pq+p+q)/(8pq)$	$p=6, q=7$	1.756
	URUYR6-5872	$(p+q+4pq)/8pq$	$p=6, q=7$	1.756
	UZLJPQ-5872	$a+b+4ab/8ab$	$a=6, b=7$	1.7562
	W7GZEM-5872	$(p+q+4pq)/8pq$	$p=6, q=7$	1.7563
	W7KMRU-5877	$(p+q+4pq)/8pq$	$p=6, q=7$	1.7563
	WAKXNU-5877	$(p+q+4pq)/8pq$	$p=6, q=7$	1.756
	YGVZ2-5872	$(2z^2+z^1(pa+pb)/4papb)+Z0$	$a=6, b=7$	1.756
	ZEKBY9-5877	$(p+q+4pq)/8pq$	$p=6, q=7$	1.7563
	ZFX3RQ-5872	$p+q+4pq/8pq$	$p=6, q=7$	1.756

Statistical Analysis Summary of TH01
Likelihood Ratio Mode: 1.7563

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TPOX	33G37G-5872	$(1+2p)/4p$	$p=6$	3.2964
	39LYUM-5872	$(2+4p)/8p$	$p=6$	3.296
	3ECBR6-5877	$(1+2p)/4p$	$p=6$	3.296
	3F8R7M-5877	$1+2p/4p$	$p=6$	3.2964
	73W8G7-5872	$(1+2p)/4p$	$p = 6$	3.296
	77PJU3-5877	$(1+2p)/(4p)$	$p = 6$	3.2964
	786NQE-5872	$(1+2p)/4p$	$P=6$	3.296
	7F4KV8-5872	$(1+2p)/4p$	$p = 6$	3.296420582
	7PKXQF-5872	$(1+2p)/4p$	$p=6$	3.2964
	84E29B-5872	$(1+2p)/4p$	$p=6$	3.2964
	8MBE64-5872	$(1+2p)/4p$	$p = 6$	3.2964
	9HTLAG-5877	$1+2p/4p$	$p=6$	3.296420582
	AFLNDE-5877	$(1+2p)/4p$	$p=0.0894$	3.2964
	BQVKU2-5877	*	*	2.848
	CV64QA-5872	$2p+1/4p$	$P=6$	3.2964
	DUAZED-5877	$(1+2p)/4p$	$p=6$	3.2964
	EBAAT4-5877	$(1+2p)/4p$	$p=6$	3.2964
	ENJRPD-5877	$(1+2p)/4p$	$p=6$	3.3
	ERKVGZ-5872	$(1+2p)/4p$	$p = 6$	3.2964
	FDX37Y-5877	N/A	N/A	2.848
	GDT3MA-5872	$(1+2p)/4p$	$p = 6$	3.296
	GU22R8-5877	$(1+2p)/4p$	$p=6$	3.296
	GW36G9-5872	$H0:A*0,25+0,5*A^2H1:A^2$	$A=6$	3.296420734
	H9TEJ8-5872	$(1+2p)/4p$	$p=6$	3.2964

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
TPOX	HWYZF6-5877	$R = a(k1) + a^*a(k0), U = a^*a, LR = R/U$	$a=6, k0=0.5, k1 = 0.25$	3.296
	JHJYKY-5877	$(1+2p)/4p$	$p = 6$	3.2964
	JLGFXT-5877	*	*	2.848
	KKHW9X-5872	$(1+2p)/4p$	$p=6$	3.2964
	NBJ97Q-5872	$(1+2p)/4p$	$p=6, q=8$	3.296
	NQDVAW-5872	$(1+2p)/4p$	$p=6$	3.2964
	P99QKY-5872	$0.5+1(4p)$	$p = 6$	0.8576
	PTX3AK-5877	$(1+2p)/4p$	$p=6$	3.2964
	PU94VJ-5877	$(1+2p)/4p$	$p = 6$	3.2964
	TYCCNJ-5877	N/A	N/A	2.848
	UALBVW-5877	$(2p+1)/(4p)$	$p=6$	3.296
	URUYR6-5872	$(1+2p)/4p$	$p = 6$	3.296
	UZLJPQ-5872	$2a+1/4a$	$a=6$	3.2964
	W7GZEM-5872	$(1+2p)/4p$	$p=6$	3.2964
	W7KMRU-5877	$(1+2p)/4p$	$p = 6$	3.2964
	WAKXNU-5877	$(1+2p)/4p$	$p=6$	3.296
	YGVZ2-5872	$(z1/2pa)+z0$	$a=6$	3.296
	ZEKBY9-5877	$(1+2p)/4p$	$p=6$	3.2964
	ZFX3RQ-5872	$1+2p/4p$	$p=6$	3.296

Statistical Analysis Summary of TPOX

Likelihood Ratio Mode: 3.2964

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
vWA	33G37G-5872	0.5		0.5000
	39LYUM-5872	1/2		0.5
	3ECBR6-5877	2/4	N/A	0.5000
	3F8R7M-5877			0.5000
	73W8G7-5872	1/2		0.5000
	77PUJ3-5877	1/2	N/A	0.50000
	786NQE-5872	2/4		0.500
	7F4KV8-5872	2/4		0.5
	7PKXQF-5872	0.50		0.5000
	84E29B-5872	1/2		0.5000
	8MBE64-5872	2/4		0.5
	9HTLAG-5877	2/4	-	0.5
	AFLNDE-5877	1/2		0.5000
	BQVKU2-5877	*	*	0.5000
	CV64QA-5872	1/2		0.5
	DUAZED-5877	1/2		0.5000
	EBAAT4-5877	1/2		0.5000
	ENJRPD-5877	1/2	NA	0.5
	ERKVGZ-5872	2/4	Not applicable	0.5000
	FDX37Y-5877	N/A	N/A	0.5000
	GDT3MA-5872	1/2	-	0.5
	GU22R8-5877	0.5		0.5000
	GW36G9-5872	$H_0:(C^2)*0,5H_1:C^2$	C=16	0.5
	H9TEJ8-5872	1/2		0.5000

TABLE 6 - Kinship Likelihood Ratio Results

Locus	WebCode-Test	Formula	Allele Legend	Likelihood Ratio
vWA	HWYZF6-5877	$R=2bc(k_0), U=2bc, LR=R/U$	$b=15, c=17, k_0=0.5$	0.5
	JHJYKY-5877	1/2		0.5000
	JLGFXT-5877	*	*	0.5000
	KKHW9X-5872	1/2		0.5000
	NBJ97Q-5872	1/2	$p=15, r=17, q=16$	0.5000
	NQDVAW-5872	1/2		0.5000
	P99QKY-5872	0.5		0.5
	PTX3AK-5877	2/4	N/A	0.5
	PU94VJ-5877	1/2		0.5
	TYCCNJ-5877	N/A	N/A	.5000
	UALBVV-5877	1/2	/	0.500
	URUYR6-5872	0.5		0.5
	UZLJPQ-5872	$1/2a^2/a^2=1/2$	$a=15 \text{ or } 16 \text{ or } 17$	0.5
	W7GZEM-5872	1/2		0.5
	W7KMRU-5877	1/2		0.50000
	WAKXNU-5877	1/2		0.500
	YGVZ2-5872	Z0	Z0	0.5000
	ZEKBY9-5877	2/4		0.5000
	ZFX3RQ-5872	1/2		0.5

Statistical Analysis Summary of vWA
Likelihood Ratio Mode: 0.5000

Kinship DNA Statistics

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

TABLE 7

WebCode-Test	Kinship Index	Claim Supported?
33G37G-5872	2.5205	Inconclusive
39LYUM-5872	2.52	Inconclusive
3ECBR6-5877	2.521	Yes
3F8R7M-5877	2.5205	Inconclusive
73W8G7-5872	2.521E+00	No
77PJU3-5877	2.521	Yes
786NQE-5872	2,520515024	No
7F4KV8-5872	2.520515024	Inconclusive
7PKXQF-5872	2.5205	Inconclusive
84E29B-5872	2.5205	Inconclusive
8MBE64-5872	2.5205	Inconclusive
9HTLAG-5877	0.8170	Yes
AFLNDE-5877	2.5205	Inconclusive
BQVKU2-5877	2.0	Yes
CV64QA-5872	2.5205	Inconclusive
DUAZED-5877	2.5205	No
EBAAT4-5877	2.5206	Yes
ENJRPD-5877	2.52	Inconclusive

TABLE 7 - Kinship DNA Statistics

WebCode-Test	Kinship Index	Claim Supported?
ERKVGZ-5872	2.535	Inconclusive
FDX37Y-5877	2.000	Yes
GDT3MA-5872	2.505	Yes
GU22R8-5877	2.521	Inconclusive
GW36G9-5872	2.520514817	Inconclusive
H9TEJ8-5872	2.5205	Inconclusive
HWYZF6-5877	2.518	No
JHJYKY-5877	2.522	Yes
JLGFXT-5877	2.0	Yes
KKHW9X-5872	5.0410	Inconclusive
NBJ97Q-5872	2.521	Yes
NQDVAW-5872	2.5203	Inconclusive
P99QKY-5872	2.493163737	Inconclusive
PTX3AK-5877	2.521	Yes
PU94VJ-5877	2.520	Yes
TYCCNJ-5877	2.000	Yes
UALBVV-5877	0.016	Inconclusive
URUYR6-5872	2.521	Yes
UZLJPQ-5872	2.5205	Inconclusive
W7GZEM-5872	2.5205	Inconclusive

TABLE 7 - Kinship DNA Statistics

WebCode-Test	Kinship Index	Claim Supported?
W7KMRU-5877	2.52	Inconclusive
WAKXNU-5877	2.517	Inconclusive
YGVZR2-5872	2.519	Yes
ZEKBY9-5877	2.5204	Yes
ZFX3RQ-5872	71.6%	Yes

Response Summary	Participants: 43
<i>Is the relationship claim of Half Siblings supported?</i>	
Yes	17
No	4
Inconclusive	22

Additional Kinship Statistical Results

TABLE 8

WebCode-Test	Additional Statistical Results
33G37G-5872	The probability of kinship is calculated via Excel using formula derived from the DNA View software. Laboratory SOP DNA-AN013: Guidelines for Interpretation and Reporting DNA Paternity/Maternity/Kinship profile. Clause 4.1.4.3 Parentage/Sibling/Kinship scenario states that for LR " $10 \geq LR > 0$ " will interpreted as Inconclusive.
3ECBR6-5877	The shared results between Alleged Sibling C and Alleged Sibling D are 2.521 times more likely to be observed if they were half-siblings rather than if they were unrelated.
3F8R7M-5877	AABB standards state that this result should be reported as inconclusive and a statement such as "Pu and Linacre have shown at a likelihood ratio less than 33 that the predictive value of test results is less than 99% and at a likelihood ratio less than 1 that the predictive value of test results is less than 90%. (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.)" would need to be included in the report.
73W8G7-5872	Based on the results provided, a half-sibling relationship cannot be established or ruled out. Therefore, a deeper analysis may be required.
77PJU3-5877	The alleles shared between the two individuals are 2.521 times more likely to be observed if they were half-siblings, rather than if they were unrelated.
786NQE-5872	Conclusion: Inconclusive. With the genetic information obtained from the half-siblings, the probability value was calculated, which is less than the established minimum, therefore, it is not possible to determine the relationship.
7PKXQF-5872	The probability of kinship is calculated via Excel using formula derived from the DNA View software. Laboratory SOP DNA-AN013: Guidelines for Interpretation and Reporting DNA Paternity/Maternity/Kinship profile. Clause 4.1.4.3 Parentage/Sibling/Kinship Scenario states that for LR " $10 \geq LR > 0$ " will interpreted as Inconclusive.
84E29B-5872	The probability of kinship is calculated via Excel using formula derived from the DNAView Software. Laboratory SOP DNA-AN013: Guidelines for Interpretation and Reporting DNA Paternity/Maternity/Kinship profile. Clause 4.1.4.3 Parentage/Sibling/Kinship Scenario states that for LR " $10 \geq LR > 0$ " will be interpreted as inconclusive.
9HTLAG-5877	These two person show 69.56 % of their DNA. According to Probability percentage calculation they may be a half-sibling of each other with the confidence of 44.96434560 %.
AFLNDE-5877	CRI: 2.5205. Probability: 71.5951% (50% prior probability). Outcome: Inconclusive. AABB RT Standard 5.3.8.3 states that likelihood ratios of 0.1 through 10 shall be considered inconclusive for the tested relationship.
BQVKU2-5877	*The likelihood ratios were calculated with the Kin Calc software that uses standard formulae for simple PI/s and 2-person KI's that incorporate a theta value of 0.1 with allele probabilities with no rounding and a 1/k prior instead of just x/N. Locus D12S391 was omitted due to linkage with VWA. ^ Only GlobalFiler loci used in calculation per TL, additional loci (PentaD and PentaE) not tested at our laboratory.
CV64QA-5872	The genetic finding is 2.5 times more likely if the individuals analyzed are half-siblings than if they were not related.
ENJRPD-5877	NA=Not applicable; no alleles are shared between the two individual at that specific locus. LR values are expressed with three significant figures based on our protocol. Using three significant figures represents how [Laboratory] would determine kinship on this case. We do not use 4 significant figures because the NIST STR allele frequencies are based on N value of < 1000.

TABLE 8

WebCode-Test	Additional Statistical Results
FDX37Y-5877	The reported values are Kinship Index (KI) values calculated using Kin CALc 5.0.12 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 1/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 our 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.
GDT3MA-5872	The two DNA profiles cannot be excluded as a potential African American half sibling relationship.
GU22R8-5877	This laboratory only provides the likelihood ratio of half-sibling relationship versus being unrelated, and does not make a conclusion.
JHJYKY-5877	There is limited support for Subjects C & Subject D for a half siblings' relationship.
JLGFXT-5877	*The likelihood ratios were calculated with the Kin CALc software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of just x/N. Combined kinship index omits the locus D12S391 due to linkage disequilibrium. ^ Only GlobalFiler loci used in calculation per TL, additional loci (PentaD, PentaE) not tested at our laboratory.
K8WKWM-5872	Half Sibling relationships are not evaluated at this lab.
KKHW9X-5872	Locus vWA was excluded from the kinship calculations due to linkage with D12S391.
NBJ97Q-5872	Limited support.
NQDVAW-5872	The probability of kinship is calculated via Excel using formula derived from the DNAAview software. Laboratory SOP DNA-AN013: GUIDELINES FOR INTERPRETATION & REPORTING DNA PATERNITY / MATERNITY / KINSHIP PROFILES Clause 4.1.4.3 Parentage/Sibling/Kinship scenario states that for LR "10≥LR>0" will be interpreted as inconclusive.
PMBG2X-5877	Half sibling relationships not reported.
PTX3AK-5877	The shared results between Alleged Sibling 1 and Alleged Sibling 2 are 2.521 times more likely to be observed if they were half-siblings rather than if they were unrelated.
TYCCNJ-5877	The likelihood ratios shown above [Table 6: Kinship Likelihood Ratio Results] were calculated using the KinCALc software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of x/N. The combined KI (African American) shown above [Table 7: Kinship DNA Statistics] does not include D12. D12 was removed due to genetic linkage with vWA. The Penta D and Penta E loci were not calculated as these loci are not tested in this laboratory. The combined KI (African American) is only calculated to 2 significant figures by the KinCALc software.
URUYR6-5872	Kinship calculations in this laboratory would normally involve the use of the Balding and Nichols sampling formula incorporating Fst. To allow comparison of our results to those of other laboratories, I have opted to calculate the KI as per the example provided using the product rule only. It is expected that a lower KI would be obtained with the incorporation of Fst. Using the product rule, the DNA evidence provides slight support for the proposition that the two males are half siblings.
UZLJPQ-5872	The LR value reached it's in favor of the relationship hypothesis; however, it does not allow by itself to make a decision about the relationship between the people analyzed. It is necessary to evaluate non-genetic information or alternatively, complement the genetic analysis with more relatives, Y chromosome analysis and mitochondrial DNA.
W7GZEM-5872	On comparison of the DNA profiles obtained, I found that the relationship between the donor of "C" with "D" cannot be conclusively determined.

TABLE 8

WebCode-Test	Additional Statistical Results
W7KMRU-5877	KI > 1; however, per our policy, this will be reported as inconclusive because the KI is < 1000
XQMVLJ-5872	Half sibling kinship statistic not calculated at this laboratory.
ZEKBY9-5877	The shared results between the alleged siblings are 2.5204 times more likely to be observed if they were half-siblings rather than if they were unrelated.

Additional Comments

TABLE 9

WebCode-Test	Additional Comments
33G37G-5872	1) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 3" is the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 2) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 4" is not the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 3) Extraction: -Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4) Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express (GFE) on PROFLEX PCR System. - Item 3 and Item 4 were further amplified using AmpFISTR Y-Filer PCR Amplification kit on 9700 GeneAmp PCR System. 5) Electrophoresis: -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 1, Item 2, Item 3 and Item 4 (Globalfiler Express). -Electrophoresis were carried out on Genetic Analyzer 3500xl for Item 3 and Item 4 (Yfiler). 6) Quality Control: -Reagent blank, positive control and negative control were incorporated in the overall analysis and gave designated results. 7) NM represents non male profile. 8) The statistical formula were derived from DNAView Statistical Software and calculated using Microsoft Excel.
3ECBR6-5877	Assuming prior probabilities of 10%, 50% and 90%, the probability of paternity in this case is greater than 99.99%. The following locus was not used in the statistical calculation: vWA. For the locus and combined Paternity Index values. Our laboratory protocol is to report the smallest CPI calculated in Popstats of the selected population groups/ethnicities.
3FRDYD-5877	Combined Paternity Index value excludes D12S391 due to linkage with vWA (both loci listed with per-locus PI) and uses Southwest Hispanic database).
3M2YKL-5877	D12 was removed due to Laboratory procedures. Caucasian stat reported since the Known Mother and Alleged Father A are Caucasian.
77PJU3-5877	For the locus and Combined Paternity Index values, our lab reports the smallest Paternity Index value calculated, using the FBI PopStats program for selected population groups/ethnicities (African American, Caucasian, Southeast and Southwest Hispanics). Based on our laboratory protocol, the vWA locus is not used for kinship statistical estimation purposes. Additionally, the Probability of Paternity is calculated using prior values of 0.1, 0.5, and 0.9. Probability of Paternity values greater than 99.99% are reported as >99.99%.
786NQE-5872	It is observed that the alleged father B does not have all the alleles that the daughter must inherited from her biological father. According to the protocols established in our laboratory, statistical calculations are not performed for the excluded cases.
7DPWVQ-5872	- vWA and SE33 not included for statistics calculations per lab SOP. - NIST 2017 is the database in Popstats.
7F4KV8-5872	Statistical software used for PI calculation in our laboratory includes mutation rate information for particular loci into PI formula.

TABLE 9

WebCode-Test	Additional Comments
7PKXQF-5872	<p>1) On comparison to the DNA profiles obtained, i found that the source of bloodstained specimen "Item 3" is the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 2) On comparison to the DNA profiles obtained, i found that the source of bloodstained specimen "Item 4" is not the biological father to the source of bloodstained specimen "Item 2" (given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 3) Extraction: -Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4) Amplification: -Item 1, Item 2, Item 3 and Item 4 were amplified using GlobalFiler Express on 9700 GeneAmp PCR system. -Item 3 and Item 4 were amplified using AMPFLSTR Y-Filer Kit on 9700 GeneAmp PCR System. 5) Electrophoresis: -All electrophoresis were carried out using Genetic Analyzer 3500xL. 6) Quality Control: -Reagent blank, Positive Control and Negative Control carried out throughout the analysis all gave intended results. 7) NM represents non male profile. 8) The statistical formula were derived from DNAAview Statistical Software and calculated using Microsoft Excel.</p>
84E29B-5872	<p>1) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 3" is the biological father to the source of bloodstained specimen "Item 2".(given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 2) On comparison to the DNA profiles obtained, I found that the source of bloodstained specimen "Item 4" is not the biological father to the source of bloodstained specimen "Item 2".(given that the biological mother is represented by the source of bloodstained specimen "Item 1"). 3) Extraction: Item 1, Item 2, Item 3 and Item 4 were extracted using in-situ method. 4) Amplification: Item 1,Item 2, Item 3 and Item 4 were amplified using GlobalFiler Express 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 Y-Filer Amplificocation 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 DNAAView Statistical Software and calculated using Microsoft Excel. 8) NM: Non-Male profile.</p>
8D3UK9-5877	<p>It is our Laboratory's policy to report the most conservative number when using multiple population databases. Additionally, vWA and D12S391 are not included together in the same statistical calculation. The locus selected provides the most discriminating potential. The Combined Paternity Index value reported in Part 2 [Table 5: Paternity DNA Statistics & Conclusions] is from the Southwest Hispanic database using vWA (excluding D12S391). We do not report the Probability of Paternity.</p>
ARWY24-5872	<p>PI is not calculated when an individual is excluded as the biological father of the offspring. The laboratory does not use vWA or D12 when calculating statistics for related individuals.</p>
BQVKU2-5877	<p>Our laboratory does not calculate probability of paternity. The likelihood ratios were calculated with the Kin Calc software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of just x/N. For Item 3 VWA was omitted due to linkage with D12S391. For Item 4 was an exclusion; therefore, neither VWA nor D12S391 was omitted.</p>
BQZZ9N-5872	<p>NR=No Results</p>
C8ZC9C-5877	<p>vWA and D12S391 have been found to be linked and cannot be used together in kinship analysis. The reported KI is selected based on the KI with the most informative of the two loci (vWA or D12; in this case VWA) and designated ethnicity of the alleged father.</p>
CV64QA-5872	<p>Although the value obtained is in favor of the kinship hypothesis, it is suggested to complement the analysis with uniparental markers.</p>

TABLE 9

WebCode-Test	Additional Comments
DTFCVH-5877	CURRENTLY, THE LABORATORY DOES NOT DO SIBSHIP.
ERKVGZ-5872	Part I & II [Table 1: STR Amplification Kit(s) & Results and Table 2: Paternity Index Results]: Item 3: No PI provided for D12S391; Minimum Allele Frequency of 0.01 used for D3S1358 allele 19 and SE33 allele 19.2. The Laboratory does not include the locus D12S391 for kinship statistical calculation. The Laboratory will use a Minimum Allele Frequency of 0.01 when the Allele Frequency is less than 0.01 for kinship statistical calculation. The Laboratory uses the NIST (combined races n=1036) dataset for kinship statistical calculation. Item 4: No PI provided due to exclusion. The Laboratory will exclude the alleged parent as a biological parent of the child when there are three or more markers with genetic inconsistencies. Likelihood ratio is not calculated when the alleged parent is excluded. Legend: " [^] " refers to "to the power of". Part III [Table 6: Kinship Likelihood Ratio Results and Table 7: Kinship DNA Statistics]: The Laboratory does not include the locus D12S391 for kinship statistical calculation. The Laboratory will report that the evidence do not provide conclusive support if cumulative likelihood ratio is 0.1 through 10 for half sibling relationship.
FDVD22-5872	D12S391 is omitted from the final calculation, as per laboratory policy. 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.
FDX37Y-5877	For Part I [Table 2: Paternity Index Results] - PI values at specific loci, Part II [Table 5 Paternity DNA Statistics & Conclusions] - Combined PI value, and Part III [Table 7: Kinship DNA Statistics] Kinship DNA Statistics: the reported values are Kinship Index (KI) values calculated using Kin CALc 5.0.12 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 1/N. Due to possible genetic linkage between the vWA and D12S391 loci, the genotypes from only one of these loci were used to calculate the combined KI. For Part II [Table 5: Paternity DNA Statistics & Conclusions]: our laboratory does not report Probabilities of Paternity.
H9TEJ8-5872	Paternity DNA: the software DNA-View (used to calculate the paternity index) uses the minimum frequency in those cases where the observed allele frequency is below the minimum frequency. Therefore, the PI reported for marker SE33 in this test was calculated using the minimum frequency of 0.0069 by DNA-View. Under the same criteria, individual PIs in markers D2S441, D22S1045, SE33, D10S1248 and D12S391 in Item 4 have only two significant figures.
HFE6AA-5872	Y-STR profiling of items 3 and 4 was not undertaken as child was female. As per laboratory policy paternity index calculations were not undertaken for Alleged father B as there were greater than 3 loci across the profile showing exclusion.
J2C32Z-5872	DYS391 is reported as INC for all samples tested as per laboratory policy. For all samples tested, any labeled peaks that are likely due to PCR/STR artifact were not reported and will not be used for conclusions or comparisons. The profile obtained from the alleged father A is 640,000,000 to 666,000,000,000 times more likely if he is the father of the child than if he is unrelated. The relative chance of paternity for a Caucasian individual assuming a 50% prior chance is 99.99%. Paternity is practically proven. The alleged father A is consistent with being the biological father of the child. The alleged father B is excluded as being the biological father of the child.
JLGFXT-5877	*The likelihood ratios were calculated with the Kin CALc software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of just x/N. Combined kinship index omits the locus D12S391 due to linkage disequilibrium.
K9R2B7-5872	NR = No Results
L2XMK2-5872	Alleged Father A is the biological father of the child in question.

TABLE 9

WebCode-Test	Additional Comments
NQDVAW-5872	1) On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 3" is the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 2) On comparison to the DNA profiles obtained, I found that the source of bloodstain specimen "Item 4" is not the biological father to the source of bloodstain specimen "Item 2" (given that the biological mother is represented by the source of bloodstain specimen "Item 1"). 3) 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 9700 GeneAmp PCR System. 5) Electrophoresis: Electrophoresis was carried out using Genetic Analyzer 3500xl 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 designated results. 7) The statistical formula were derived from DNView Statistical Software and calculated using Microsoft Excel. 8) NM represents non-male profile.
PMBG2X-5877	AF1, M, and C Comparison vWA and D12S391 are only 6.3 Mb apart and significant linkage disequilibrium has been detected. In this pedigree, the relationship index for each locus is as follows: vWA = 3.5224; D12S391 = 3.1114. As such, D12S391 will be the only locus evaluated. D12S391 has more alleles in its locus (23 versus 15) and more variation amongst the population statistics for each allele than vWA.
PMD6KW-5872	Individual completing the proficiency test is not qualified in statistical calculations, thus no statistical calculations have been provided for assessment.
PTVD6M-5872	Locus vWA was not statistically considered for this test due to the known linkage with D12S391. Locus SE33 was not statistically considered for this test due to laboratory standard operating procedures. No YSTR testing at this laboratory. No additional loci tested at this laboratory. Kinship statistics not applicable to this laboratory (only perform parent-child comparisons).
PTX3AK-5877	For part II [Table 5: Paternity DNA Statistics & Conclusions], the locus vWA was not used in the statistical calculation. For the locus and combined paternity index values, our laboratory protocol is to report the smallest CPI calculated in FBI Popstats of the selected population groups/ethnicities. The probability of paternity was calculated assuming prior probabilities of 10%, 50% and 90%.
PU94VJ-5877	For part II [Table 5: Paternity DNA Statistics & Conclusions], the locus vWA was not used in the statistical calculation. For the locus and combined paternity index values, our laboratory protocol is to report the smallest CPI calculated in FBI Popstats of the selected population groups/ethnicities. The probability of paternity was calculated assuming prior probabilities of 10%, 50% and 90%.
QZUGCW-5872	NR = No Result
RKEH3P-5872	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.
TNRV34-5872	No statistics were calculated on vWA and SE33 per laboratory SOP.

TABLE 9

WebCode-Test	Additional Comments
TYCCNJ-5877	For the paternity statistics, the likelihood ratios entered were calculated using the KinCALc software that uses standard formulae for simple PI's and 2-person KI's that incorporate a theta value of 0.01 with allele probabilities with no rounding and a 1/k prior instead of x/N. The combined PI (Caucasian) shown does not include vWA. vWA was removed due to genetic linkage with D12. The Penta D and Penta E loci were not calculated as these loci are not tested in this laboratory. This laboratory does not report probability of paternity and so this value was not calculated.
UZLJPQ-5872	- Alleged father B was excluded because he does not share the paternal obligatory alleles, our laboratory does not perform exclusion calculations.
V2BAAV-5877	Three Y-STR types detected for Female Child sample - types are low level (possible background contamination) - limited/inconclusive, auSTR and X-STR loci will be reported. Only loci available in LIMS used for PI calculations, NC = not calculated. D22 not used for PI calculations due to potential dropout. NR = no results. Y-STR calls for Item 1 and 2 listed in the Additional DNA section - Only Y-STRs not included on the Item 3 and 4 page will be included in the Additional DNA section. Sibship stats not calculated - LIMS is used by [Laboratory] and uses a different database - no hand calculations performed
W2RKQF-5872	The NIST population used for statistics is the 2017 dataset. Per laboratory procedures, vWA and SE33 were not included in statistical calculations.
W7GZEM-5872	Amplification: Item 1, Item 2, Item 3 and Item 4 were amplified using Globalfiler Express PCR Amplification Kit on 9700 GeneAmp PCR System. Electrophoresis: The electrophoresis process was carried out by Genetic Analyzer 3500xl for Item 1 to Item 4. Quality Control: Reagent blank, positive control and negative control were carried out along with the analysis and all gave the intended results.
WRGJ6E-5872	Our laboratory does not use vWA or SE33 for statistical calculations.
WYXW8K-5872	One population database ethnicity was chosen for all statistical calculations in this test, per CTS instructions. D12S391 is omitted from the CPI calculation, per laboratory policy. Our laboratory does not calculate a likelihood ratio for half-siblings or for exclusions.
XQMVLJ-5872	Per laboratory policy, D12S391 genetic locus not used for statistical analysis and CPI value truncated to 2 significant figures.
XWQWMD-5872	Our lab only reports the combined CPI, not a particular ethnic group. If an alleged parent is excluded, we do not calculate stats for that person. We do not include vWA in stats. Our lab only does paternity cases, not any other family relationship.
XWTLQB-5872	The D12S391 locus is not utilized by our laboratory for statistics when the vWA locus is being used due to the potential for linkage between those loci for distant relatives. Following laboratory protocol, the CPI value is truncated to 2 significant figures. The probability of Paternity value is truncated to 4 integers past the decimal point. Item 4 was eliminated as a possible biological parent due to > or = to 3 inconsistencies and therefore no individual locus LRs were calculated, as per our manual. All locus LR calculations were left blank due to the visual elimination for Item 4.
XZQ8HD-5872	We are using the FBI Popstats program with the NIST 1036 (2017 amended) frequencies. Paternity indices were not calculated for Item 4, per laboratory policy, due to exclusion.
YGVZR2-5872	Raw LR for combined paternity= 730,906,262,921 (Theta not used)

TABLE 9

WebCode-Test	Additional Comments
ZEKBY9-5877	For the DNA Paternity Statistics: For the locus and Combined Paternity Index values, our laboratory protocol is to report the smallest CPI calculated in PopStats of the selected population groups/ethnicities. Assuming prior probabilities of 10%, 50%, and 90%, the probability of paternity in this case is greater than 99.99%. The following locus was not used in the statistical calculation: vWA.
ZZEH7B-5872	our lab does not use vWA or SE33 in Paternity statistics

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 22-5872: DNA Parentage

DATA MUST BE SUBMITTED BY **Oct. 24, 2022, 11:59 p.m.** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: 9C8PME

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 DPF3 - FTA Microcards):

- Item 1: Blood Sample from Known Parent (Caucasian Mother)
- Item 2: Blood Sample from Known Child (Daughter)
- Item 3: Blood Sample from Alleged Father A (Caucasian)
- Item 4: Blood Sample from Alleged Father B (African American)

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 Probabilistic Genotyping 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 Probabilistic Genotyping Software Used (if applicable):

Alleles below are sorted in Default order.

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

Part I (continued): DNA Analysis - Additional DNA

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

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

Part II: PATERNITY DNA STATISTICS

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: <http://www.cstl.nist.gov/strbase/NISTpop.htm#Autosomal>
 - a. On the NIST web site, access the population database by selecting the hyperlink labeled "Allele frequencies from autosomal STRs as Excel file" under the title "NIST 1036 U.S. Population Dataset".
3. If you are unable to use one of the suggested population databases, report the population database used in the blank provided next to the 'Other Pop. Database' option. Due to the tendency for allele frequencies to vary amongst different databases, no consensus value will be determined for this option. When reporting a population database name, please refrain from using terms that would allude to a laboratory specific name or location; general terms such as 'local/state database' or 'laboratory specific database' are preferred.
4. If you did not calculate paternity statistics, please provide an explanation in your additional comments.

1. Choose a Population Database:

FBI Popstats Pop. Database:

NIST STRBASE Pop. Database:

Other Pop. Database:

2. Record the Combined Paternity Index value:

3. Record the Probability of Paternity:

Part III: KINSHIP DNA STATISTICS

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

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

Example: Questioned Half Sibling Relationship

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

Scenario:

The two DNA profiles below are presented as a potential African American half sibling relationship. Using the allele frequencies shown for the tested loci, calculate the likelihood ratio for support of the proposed relationship versus being unrelated.

Locus	C	D	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
D1S1656	15,16.3	12,15	12: 0.0643	15: 0.1579	<input type="text"/>	<input type="text"/>	<input type="text"/>
			16.3: 0.1023				
D2S1338	21,22	19,22	19: 0.1389	21: 0.1360	<input type="text"/>	<input type="text"/>	<input type="text"/>
			22: 0.1374				
D2S441	11,14	11,12	11: 0.3626	12: 0.1652	<input type="text"/>	<input type="text"/>	<input type="text"/>
			14: 0.2675				
D3S1358	15,17	15,16	15: 0.3085	16: 0.3187	<input type="text"/>	<input type="text"/>	<input type="text"/>
			17: 0.2120				
D5S818	12,14	8,12	8: 0.0468	12: 0.3684	<input type="text"/>	<input type="text"/>	<input type="text"/>
			14: 0.0161				

Locus	C	D	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
D7S820	10,11	10,10	10: 0.3363	11: 0.2032	<input type="text"/>	<input type="text"/>	<input type="text"/>
D8S1179	11,14	13,14	11: 0.0526	13: 0.2193	<input type="text"/>	<input type="text"/>	<input type="text"/>
			14: 0.2939				
D10S1248	16,17	13,14	13: 0.2339	14: 0.2763	<input type="text"/>	<input type="text"/>	<input type="text"/>
			16: 0.0877	17: 0.0249			
D12S391	16,18	17,18	16: 0.0673	17: 0.1667	<input type="text"/>	<input type="text"/>	<input type="text"/>
			18: 0.2529				
D13S317	12,12	9,13	9: 0.0336	12: 0.4181	<input type="text"/>	<input type="text"/>	<input type="text"/>
			13: 0.1404				
D16S539	9,9	11,12	9: 0.1827	11: 0.3143	<input type="text"/>	<input type="text"/>	<input type="text"/>
			12: 0.2047				
D18S51	12,20	15,20	12: 0.0760	15: 0.1652	<input type="text"/>	<input type="text"/>	<input type="text"/>
			20: 0.0629				
D19S433	13,15.2	11,13.2	11: 0.0629	13: 0.2456	<input type="text"/>	<input type="text"/>	<input type="text"/>
			13.2: 0.0526	15.2: 0.0614			
D21S11	28,29	28,29	28: 0.2456	29: 0.2047	<input type="text"/>	<input type="text"/>	<input type="text"/>
D22S1045	12,16	15,16	12: 0.0541	15: 0.2515	<input type="text"/>	<input type="text"/>	<input type="text"/>
			16: 0.1915				

Locus	C	D	Allele Frequencies		Formula Used	Allele Legend	Likelihood Ratio
CSF1PO	11,12	10,12	10: 0.2500	11: 0.2485	<input type="text"/>	<input type="text"/>	<input type="text"/>
			12: 0.2953				
FGA	23,23	19.2,23	19.2: 0.0029	23: 0.1696	<input type="text"/>	<input type="text"/>	<input type="text"/>
PentaD	2.2,10	2.2,13	2.2: 0.1140	10: 0.0994	<input type="text"/>	<input type="text"/>	<input type="text"/>
			13: 0.0833				
PentaE	12,13	5,16	5: 0.0950	12: 0.1287	<input type="text"/>	<input type="text"/>	<input type="text"/>
			13: 0.1038	16: 0.0409			
SE33	16.2,18	18,34	16.2: 0.0044	18: 0.1199	<input type="text"/>	<input type="text"/>	<input type="text"/>
			34: 0.0029				
TH01	6,7	6,7	6: 0.1316	7: 0.4079	<input type="text"/>	<input type="text"/>	<input type="text"/>
TPOX	6,8	6,6	6: 0.0894	8: 0.3680	<input type="text"/>	<input type="text"/>	<input type="text"/>
vWA	15,17	16,16	15: 0.1915	16: 0.2500	<input type="text"/>	<input type="text"/>	<input type="text"/>
			17: 0.2354				

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

2. Is the relationship of Half Siblings 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 ASCLD/LAB, 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 ASCLD/LAB, ANAB, and/or A2LA. (Accreditation Release section below must be completed.)
- This participant's data is **not** intended for submission to ASCLD/LAB, 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.
(Include ASCLD/LAB Certificate here)

A2LA Certificate No.

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

Authorized Contact Person and Title

Laboratory Name

Location (City/State)