



# Collaborative Testing Services, Inc

## FORENSIC TESTING PROGRAM

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## DNA-Blood Test No. 23-5803

### Summary Report

Each participant received a sample set consisting of two known bloodstains and two questioned stains which they were requested to analyze using their existing protocols. Data were returned from 96 participants and are compiled into the following tables:

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

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

## **Manufacturer's Information**

Each sample set consisted of two known bloodstains on FTA™ Micro Cards (Items 1 & 2), and two questioned bloodstains on colored fabric (Items 3 & 4). Participants were requested to analyze these items using their existing protocols.

**SAMPLE PREPARATION:** The stains on Items 1 - 4 were prepared using human whole blood which was either drawn into citric acid preservative bags or EDTA tubes. Item 1 (75 µL) and Item 3 (50 µL) were created using blood from the same male donor. Item 2 (75 µL) and Item 4 (50 µL) were created using blood from the same female donor. Stains from different sources were prepared at separate times and were packaged once they were thoroughly dried. Completed sample sets were stored at -20°C until shipment on April 18, 2023 following completion of the verification stage.

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

**VERIFICATION:** All predistribution laboratories confirmed the manufacturer's expected associations. Consistent allelic results were reported for all STR and YSTR loci.

## Manufacturer's Information, continued

### ***Amelogenin and STR Results***

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

Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	<b>D7S820</b>	<b>D8S1179</b>	<b>D10S1248</b>	<b>D12S391</b>	<b>D13S317</b>	<b>D16S539</b>
	<b>D18S51</b>	<b>D19S433</b>	<b>D21S11</b>	<b>D22S1045</b>	<b>Amelogenin</b>	<b>CSF1PO</b>
	<b>FGA</b>	<b>Penta D</b>	<b>Penta E</b>	<b>SE33</b>	<b>TH01</b>	<b>TPOX</b>
	<b>vWA</b>	<b>DYS391</b>	<b>DYS570</b>	<b>DYS576</b>	<b>Y Indel</b>	
1	12,16	17,17	10,13	15,15	10,11	*
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17	2	
2	15,17,3	23,24	9,13	16,17	12,13	*
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14,2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29,2	8,9	8,10
	15,17	NM	NM	NM	NM	
3	12,16	17,17	10,13	15,15	10,11	*
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17	2	
4	15,17,3	23,24	9,13	16,17	12,13	*
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14,2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29,2	8,9	8,10
	15,17	NM	NM	NM	NM	

### ***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
	<b>DYS437</b>	<b>DYS438</b>	<b>DYS439</b>	<b>DYS448</b>	<b>DYS449</b>	<b>DYS456</b>	<b>DYS458</b>	<b>DYS460</b>	<b>DYS481</b>
	<b>DYS518</b>	<b>DYS533</b>	<b>DYS549</b>	<b>DYS570</b>	<b>DYS576</b>	<b>DYS627</b>	<b>DYS635</b>	<b>DYS643</b>	<b>Y GATA H4</b>
1	36	14	11,14	13	29	24	11	13	14
	15	12	13	19	32	15	16	11	23
	39	12	*	19	17	21	23	*	12
3	36	14	11,14	13	29	24	11	13	14
	15	12	13	19	32	15	16	11	23
	39	12	*	19	17	21	23	*	12

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

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

## **Summary Comments**

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The DNA-Blood test is part of the DNA Sample Specific Series, where participants are advised of the body fluid(s) present in the questioned stains. The test was designed to allow participants to assess their proficiency in the analysis and comparison of dried stains. Participants were supplied with two "known" bloodstains (Items 1 and 2) and two "questioned" stains (Items 3 and 4). Item 1 and Item 3 were created using blood from the same male donor. Item 2 and Item 4 were created using blood from the same female donor. (See Manufacturer's Information for preparation details)

### DNA Analysis

For STR results, all participants reported consistent results with the exception of two participants who reported an inconsistent result for one or more items.

For YSTR results, all participants reported consistent results.

### DNA Interpretations

Of the 96 participants that returned results, 81 reported DNA interpretations. Thirteen participants stated that the samples were analyzed for database purposes only and two participants selected the "No Interpretation" option for each conclusion.

For Item 3, all participants included the victim (Item 1) and excluded the suspect (Item 2) as possible contributors to the stain.

For Item 4, all participants excluded the victim (Item 1) and included the suspect (Item 2) as possible contributors to the stain.

# STR Amplification Kit(s) & Results

TABLE 1

WebCode	Amplification Kits (Probabilistic Genotyping Software)					
	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	
	<b>Item 1 - STR Results</b>					
27LWHJ	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12,12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
2UPTAJ	PowerPlex® Fusion 6C (STRmix)					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24	9,12	12	16,26.2	9,9.3	8,9
	15,17	11	19	17		
2V2VXX	PowerPlex® Fusion 6C					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24	9,12	12	16,26.2	9,9.3	8,9
	15,17	11	19	17		
2WDNVL	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
44MZJU	GlobalFiler™ Express					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12,12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
4YURH9	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	

TABLE 1

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

6448RX	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
69EHKF	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
69F9RV	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
6NTL7L	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
6PY9HQ	PowerPlex® Fusion 5C					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
6TGLBLP	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
6WMRYM	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

79U2ZH	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
7A86TF	GlobalFiler™					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
7K7BLM	GlobalFiler™					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
7Z4ZYD	PowerPlex® Fusion 6C					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
8P6FGB	Investigator® 24plex					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11				
8ZCWLN	GlobalFiler™ Express					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
97EG9K	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

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98MVD6	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
A6XPT9	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
AELME8	PowerPlex® Fusion 5C					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
AHMNJB	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
B939C8	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
BCRDHB	GlobalFiler™ Express					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
C8LCJ8	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

CKAHC2	PowerPlex® 21					
1	12,16	17,17		15,15	10,11	11,18
	10,10	13,14		18,22	11,12	11,12
	14,15	13,2,15	28,31,2		X,Y	12,12
	18,24	9,12	12,12		9,9,3	8,9
	15,17					
CKLWKQ	PowerPlex® Fusion 6C					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
CWY2RL	GlobalFiler™ (STRmix)					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
CX9VNL	Identifier® Direct					
1		17,17		15,15	10,11	
	10,10	13,14			11,12	11,12
	14,15	13,2,15	28,31,2		X,Y	12,12
	18,24				9,9,3	8,9
	15,17					
CZF7LB	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
D8CPW6	PowerPlex® Fusion					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
DMNWGG	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

DWYWTA	PowerPlex® Fusion 6C					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
EVZHYJ	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
F3UYTL	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
F8M4LQ	PowerPlex® Fusion					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
FP8BW8	PowerPlex® Fusion 6C					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
FVUHFV	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
G2DCNC	GlobalFiler™ Express					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

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G82QXD	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
G8GAFF	PowerPlex® Promega Fusion 5C					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12		9,9,3	8,9
	15,17	11				
GP3XMY	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
GZJJWZ	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
JAFCC4	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
JLEZCD	GlobalFiler™ (STRmix)					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
KU488N	GlobalFiler™					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

KV3RE3	PowerPlex® Fusion 6C					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26.2	9,9.3	8,9
	15,17	11	19	17		
L6XQF3	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
LBBZVW	PowerPlex® Fusion 6C					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26.2	9,9.3	8,9
	15,17	11	19	17		
M4ZX2V	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
MANMFD	GlobalFiler™					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12,12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
MEMAGY	PowerPlex® Fusion 6C					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24	9,12	12	16,26.2	9,9.3	8,9
	15,17	11	19	17		
MNA4X3	PowerPlex® Fusion 6C					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26.2	9,9.3	8,9
	15,17	11	19	17		

TABLE 1

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

MP4J4M	GlobalFiler™					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
MYNUA8	GlobalFiler™ Express					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
NBYN2C	NGM SElect					
1	12,16	17,17	10,13	15,15		
	13,14		15,16	18,22		11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	
	18,24			16,26,2	9,9,3	
	15,17					
NEGFBY	PowerPlex® Fusion 6C					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
P32E9R	PowerPlex® Fusion					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
PJ96B3	PowerPlex® Fusion 6C					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
QW72MV	GlobalFiler™ Express					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

RDQ8F7	GlobalFiler™ (STRmix)					
	12,16	17,17	10,13	15,15	10,11	--
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	--	--	16,26,2	9,9,3	8,9
	15,17	11	--	--	2	
RRRJAK	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
RZRH3Z	PowerPlex® Fusion 6C					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
TP6XWT	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
TUXZ2T	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
1	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
TV6NET	PowerPlex® Fusion 5C					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
UQQP2Q	GlobalFiler™					
	12,16	17	10,13	15	10,11	
1	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

UV637J	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
V4UB3U	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
VF4VJ2	GlobalFiler™ Express					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
VLT9KP	PowerPlex® Fusion					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
W88HYT	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
WKVF8H	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
WL8CE8	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

WQYJUV	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
WYULYR	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
WZC9YV	GlobalFiler™					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
X7YULT	PowerPlex® Fusion 6C					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
XB3T8X	GlobalFiler™ Express					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
XEVUXZ	PowerPlex® Fusion 6C					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
XFWM8J	PowerPlex® Fusion					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				

TABLE 1

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

XMHEZ7	Investigator® 24plex QS					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11				
XPPUAX	PowerPlex® ESX17 Fast System					
1	12,16	17,17	10,13	15,15		
		13,14	15,16	18,22		11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	
	18,24			16,26,2	9,9,3	
	15,17					
XRCFVU	GlobalFiler™					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
Y4ZUG9	PowerPlex® Fusion 5C					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
YCVWMQ	GlobalFiler™ (STRmix)					
1	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
YHF2BK	PowerPlex® Fusion					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
YP2NPX	PowerPlex® Fusion					
1	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				

TABLE 1

WebCode		Amplification Kits (Probabilistic Genotyping Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043	
	D7S820	D8S1179	D10S1248	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							
YW69QE	GlobalFiler™						
1	12,16	17,17	10,13	15,15	10,11		
	10,10	13,14	15,16	18,22	11,12	11,12	
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12	
	18,24			16,26,2	9,9,3	8,9	
	15,17	11,0			2,0		
YZ7E6K	GlobalFiler™						
1	12,16	17,17	10,13	15,15	10,11		
	10,10	13,14	15,16	18,22	11,12	11,12	
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12	
	18,24			16,26,2	9,9,3	8,9	
	15,17	11			2		
Z4JE6X	PowerPlex® Fusion 6C						
1	12,16	17,17	10,13	15,15	10,11		
	10,10	13,14	15,16	18,22	11,12	11,12	
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12	
	18,24	9,12	12,12	16,26,2	9,9,3	8,9	
	15,17	11	19	17			
Z6QEJK	GlobalFiler™						
1	12,16	17	10,13	15	10,11		
	10	13,14	15,16	18,22	11,12	11,12	
	14,15	13,2,15	28,31,2	15,17	X,Y	12	
	18,24			16,26,2	9,9,3	8,9	
	15,17	11			2		
ZMURHZ	GlobalFiler™						
1	12,16	17,17	10,13	15,15	10,11		
	10,10	13,14	15,16	18,22	11,12	11,12	
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12	
	18,24			16,26,2	9,9,3	8,9	
	15,17	11			2		
ZN38MK	GlobalFiler™						
1	12,16	17	10,13	15	10,11		
	10	13,14	15,16	18,22	11,12	11,12	
	14,15	13,2,15	28,31,2	15,17	X,Y	12	
	18,24			16,26,2	9,9,3	8,9	
	15,17	11			2		

TABLE 1

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

27LWHJ	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
2UPTAJ	PowerPlex® Fusion 6C (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
2V2VXX	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
2WDNVL	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
44MZJU	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
4YURH9	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
6448RX	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	

TABLE 1

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

69EHFK	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
69F9RV	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	No Results			No Results	
6NTL7L	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
6PY9HQ	PowerPlex® Fusion 5C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17					
6TGBLP	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
6WMRYM	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
79U2ZH	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

7A86TF	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
7K7BLM	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
7Z4ZYD	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
8P6FGB	Investigator® 24plex					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
8ZCWLN	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
97EG9K	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
98MVD6	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

A6XPT9	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
AELME8	PowerPlex® Fusion 5C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
AHMNJB	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
B939C8	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
BCRDHB	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
C8LCJ8	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
CKAHC2	PowerPlex® 21					
	15,17.3	23,24		16,17	12,13	12,20
2	8,8	12,15		17,23	11,12	9,11
	12,20	14,14.2	27,29		X,X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17					

TABLE 1

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

CKLWKQ	PowerPlex® Fusion 6C					
2	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
CWY2RL	GlobalFiler™ (STRmix)					
2	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	--		--		
CX9VNL	Identifier® Direct					
2		23,24		16,17	12,13	
	8,8	12,15			11,12	9,11
	12,20	14,14.2	27,29		X,X	10,13
	21,25				8,9	8,10
	15,17					
CZF7LB	GlobalFiler™					
2	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
D8CPW6	PowerPlex® Fusion					
2	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
DMNWGG	GlobalFiler™					
2	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
DWYWTA	PowerPlex® Fusion 6C					
2	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		

TABLE 1

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

EVZHYJ	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
F3UYTL	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	
F8M4LQ	PowerPlex® Fusion					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
FP8BW8	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
FVUHFV	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
G2DCNC	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
G82QXD	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

G8GAFF	PowerPlex® Promega Fusion 5C					
2	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17					
GP3XMY	GlobalFiler™					
2	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
GZJJWZ	GlobalFiler™					
2	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
JAFCC4	GlobalFiler™					
2	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
JLEZCD	GlobalFiler™ (STRmix)					
2	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	--			--	
KU488N	GlobalFiler™					
2	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	
KV3RE3	PowerPlex® Fusion 6C					
2	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		

TABLE 1

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

L6XQF3	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
LBBZVW	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
M4ZX2V	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
MANMFD	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
MEMAGY	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
MNA4X3	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
MP4J4M	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	

TABLE 1

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

MYNUA8	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
NBYN2C	NGM SElect					
	15,17.3	23,24	9,13	16,17		
2		12,15	15,15	17,23		9,11
	12,20	14,14.2	27,29	11,16	X,X	
	21,25			17,29.2	8,9	
	15,17					
NEGFBY	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
P32E9R	PowerPlex® Fusion					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
PJ96B3	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
QW72MV	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
RDQ8F7	GlobalFiler™ (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	--
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	--	--	17,29.2	8,9	8,10
	15,17	--	--	--	--	

TABLE 1

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

RRRJAK	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
RZRH3Z	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
TP6XWT	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
TUXZ2T	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
TV6NET	PowerPlex® Fusion 5C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
UQQP2Q	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
UV637J	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	No results			No results	

TABLE 1

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

V4UB3U	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
VF4VJ2	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
VLT9KP	PowerPlex® Fusion					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
W88HYT	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
WKVF8H	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	No Result			No Result	
WL8CE8	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
WQYJUV	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

WYULYR	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
WZC9YV	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
X7YULT	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
XB3T8X	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
XEVUXZ	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
XFWM8J	PowerPlex® Fusion					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
XMHEZ7	Investigator® 24plex QS					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

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XPPUAX	PowerPlex® ESX17 Fast System					
	15,17.3	23,24	9,13	16,17		
2		12,15	15,15	17,23		9,11
	12,20	14,14.2	27,29	11,16	X,X	
	21,25			17,29.2	8,9	
	15,17					

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XRCFVU	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

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Y4ZUG9	PowerPlex® Fusion 5C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17					

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YCVWMQ	GlobalFiler™ (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

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YHF2BK	PowerPlex® Fusion					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				

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YP2NPX	PowerPlex® Fusion					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,15	9,13	5,18		8,9	8,10
	15,17					

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YW69QE	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

YZ7E6K	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
Z4JE6X	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
Z6QEKJ	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
ZMURHZ	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	
ZN38MK	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
2	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

27LWHJ	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
2UPTAJ	PowerPlex® Fusion 6C (STRmix)					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
2V2VXX	PowerPlex® Fusion 6C (STRmix 2.6.3)					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
2WDNVL	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
44MZJU	GlobalFiler™ Express					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
4YURH9	GlobalFiler™ (STRMIX)					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
6448RX	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

69EHFK	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
6NTL7L	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
6PY9HQ	PowerPlex® Fusion 5C					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
6TGBLP	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
6WMRYM	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
79U2ZH	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
7A86TF	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

7K7BLM	GlobalFiler™					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
7Z4ZYD	PowerPlex® Fusion 6C (STRmix)					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
8P6FGB	Investigator® 24plex					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11				
8ZCWLN	GlobalFiler™					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
97EG9K	GlobalFiler™ (STRmix)					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
98MVD6	GlobalFiler™ (STRMIX)					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
A6XPT9	GlobalFiler™					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

AELME8	PowerPlex® Fusion 5C					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
AHMNJB	GlobalFiler™					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
B939C8	GlobalFiler™					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
BCRDHB	GlobalFiler™					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
C8LCJ8	GlobalFiler™					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
CKAHC2	PowerPlex® 21 (STRmix)					
3	12,16	17,17		15,15	10,11	11,18
	10,10	13,14		18,22	11,12	11,12
	14,15	13,2,15	28,31,2		X,Y	12,12
	18,24	9,12	12,12		9,9,3	8,9
	15,17					
CWY2RL	GlobalFiler™ (STRmix)					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

CX9VNL	Identifiler® Plus					
3		17,17		15,15	10,11	
	10,10	13,14			11,12	11,12
	14,15	13,2,15	28,31,2		X,Y	12,12
	18,24				9,9,3	8,9
	15,17					
CZF7LB	GlobalFiler™					
3		12,16	17	10,13	15	10,11
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
D8CPW6	PowerPlex® Fusion					
3		12,16	17	10,13	15	10,11
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
DMNWGG	GlobalFiler™					
3		12,16	17	10,13	15	10,11
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
EVZHYJ	GlobalFiler™ (STRmix)					
3		12,16	17	10,13	15	10,11
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
F3UYTL	GlobalFiler™					
3		12,16	17,17	10,13	15,15	10,11
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
F8M4LQ	PowerPlex® Fusion					
3		12,16	17	10,13	15	10,11
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				

TABLE 1

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

FP8BW8	PowerPlex® Fusion 6C (STRmix)					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24	9,12	12	16,26.2	9,9.3	8,9
	15,17	11	19	17		
FVUHFV	GlobalFiler™ (STRmix)					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
G2DCNC	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
G82QXD	GlobalFiler™ (STRmix)					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
G8GAFF	PowerPlex® Promega Fusion 5C					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12,12
	18,24	9,12	12,12		9,9.3	8,9
	15,17	11			2	
GP3XMY	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	
GZJJWZ	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13.2,15	28,31.2	15,17	X,Y	12
	18,24			16,26.2	9,9.3	8,9
	15,17	11			2	

TABLE 1

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

JAFCC4	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
JLEZCD	GlobalFiler™ (STRmix)					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
KU488N	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			[16],26,2	9,9,3	8,9
	15,17	11			2	
KV3RE3	PowerPlex® Fusion 6C (STRmix V2.5.11)					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
L6XQF3	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
LBBZVW	PowerPlex® Fusion 6C					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
M4ZX2V	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

MANMFD	GlobalFiler™					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
MEMAGY	PowerPlex® Fusion 6C (STRmix)					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
MNA4X3	PowerPlex® Fusion 6C (STRmix)					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
MP4J4M	GlobalFiler™					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
MYNUA8	GlobalFiler™					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
NBYN2C	NGM SElect (ReliCalc)					
3	12,16	17,17	10,13	15,15		
		13,14	15,16	18,22		11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	
	18,24			16,26,2	9,9,3	
	15,17					
NEGFBY	PowerPlex® Fusion 6C (STRmix)					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12	16,26,2	9,9,3	8,9
	15,17	11	19	17		

TABLE 1

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

P32E9R	PowerPlex® Fusion					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
PJ96B3	PowerPlex® Fusion 6C (STRmix v2.5.11)					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
QW72MV	GlobalFiler™					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
RDQ8F7	GlobalFiler™ (STRmix)					
3	12,16	17,17	10,13	15,15	10,11	--
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	--	--	16,26,2	9,9,3	8,9
	15,17	11	--	--	2	
RRRJAK	GlobalFiler™ (STRmix v 2.5.11)					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
RZRH3Z	PowerPlex® Fusion 6C (STRmix)					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
TP6XWT	GlobalFiler™					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

TUXZ2T	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
TV6NET	PowerPlex® Fusion 5C					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
UQQP2Q	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
UV637J	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
V4UB3U	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
VF4VJ2	GlobalFiler™ Express					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
VLT9KP	PowerPlex® Fusion					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				

TABLE 1

WebCode	Amplification Kits (Probabilistic Genotyping Software)					
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	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						
W88HYT	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
WL8CE8	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
WQYJUV	GlobalFiler™ (STRmix)					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
WYULYR	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
WZC9YV	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
X7YULT	PowerPlex® Fusion 6C (STRmix V2.5.11)					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24	9,12	12,12	16,26,2	9,9,3	8,9
	15,17	11	19	17		
XB3T8X	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

XFWM8J	PowerPlex® Fusion					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
XMHEZ7	Investigator® 24plex QS					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11				
XPPUAX	PowerPlex® ESX17 Fast System					
3	12,16	17,17	10,13	15,15		
		13,14	15,16	18,22		11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	
	18,24			16,26,2	9,9,3	
	15,17					
XRCFVU	GlobalFiler™					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
Y4ZUG9	PowerPlex® Fusion 5C					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
YCVWMQ	GlobalFiler™ (STRmix)					
3	12,16	17,17	10,13	15,15	10,11	
	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
YHF2BK	PowerPlex® Fusion					
3	12,16	17	10,13	15	10,11	
	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				

TABLE 1

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

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YP2NPX	PowerPlex® Fusion					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24	9,12	12		9,9,3	8,9
	15,17	11				
YW69QE	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11,0			2,0	
YZ7E6K	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
Z6QEJK	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
ZMURHZ	GlobalFiler™					
	12,16	17,17	10,13	15,15	10,11	
3	10,10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12,12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	
ZN38MK	GlobalFiler™					
	12,16	17	10,13	15	10,11	
3	10	13,14	15,16	18,22	11,12	11,12
	14,15	13,2,15	28,31,2	15,17	X,Y	12
	18,24			16,26,2	9,9,3	8,9
	15,17	11			2	

TABLE 1

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

27LWHJ	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
2UPTAJ	PowerPlex® Fusion 6C (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
2V2VXX	PowerPlex® Fusion 6C (STRmix 2.6.3)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
2WDNVL	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
44MZJU	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
4YURH9	GlobalFiler™ (STRMIX)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
6448RX	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	

TABLE 1

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

69EHFK	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
6NTL7L	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
6PY9HQ	PowerPlex® Fusion 5C					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17					
6TGBLP	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
6WMRYM	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
79U2ZH	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
7A86TF	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

7K7BLM	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
7Z4ZYD	PowerPlex® Fusion 6C (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
8P6FGB	Investigator® 24plex					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
8ZCWLN	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
97EG9K	GlobalFiler™ (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
98MVD6	GlobalFiler™ (STRMIX)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
A6XPT9	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

AELME8	PowerPlex® Fusion 5C					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
AHMNJB	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
B939C8	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
BCRDHB	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
C8LCJ8	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
CKAHC2	PowerPlex® 21 (STRmix)					
	15,17.3	23,24		16,17	12,13	12,20
4	8,8	12,15		17,23	11,12	9,11
	12,20	14,14.2	27,29		X,X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	--			--	
CWY2RL	GlobalFiler™ (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	--			--	

TABLE 1

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

CX9VNL	Identifiler® Plus					
4		23,24		16,17	12,13	
	8,8	12,15			11,12	9,11
	12,20	14,14.2	27,29		X,X	10,13
	21,25				8,9	8,10
	15,17					
CZF7LB	GlobalFiler™					
4		15,17.3	23,24	9,13	16,17	12,13
	8	12,15		15	17,23	11,12
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
D8CPW6	PowerPlex® Fusion					
4		15,17.3	23,24	9,13	16,17	12,13
	8	12,15		15	17,23	11,12
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
DMNWGG	GlobalFiler™					
4		15,17.3	23,24	9,13	16,17	12,13
	8	12,15		15	17,23	11,12
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
EVZHYJ	GlobalFiler™ (STRmix)					
4		15,17.3	23,24	9,13	16,17	12,13
	8	12,15		15	17,23	11,12
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
F3UYTL	GlobalFiler™					
4		15,17.3	23,24	9,13	16,17	12,13
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	
F8M4LQ	PowerPlex® Fusion					
4		15,17.3	23,24	9,13	16,17	12,13
	8	12,15		15	17,23	11,12
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				

TABLE 1

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

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FP8BW8	PowerPlex® Fusion 6C (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
FVUHFV	GlobalFiler™ (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
G2DCNC	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
G82QXD	GlobalFiler™ (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
G8GAFF	PowerPlex® Promega Fusion 5C					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17					
GP3XMY	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
GZJJWZ	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

JAFCC4	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
JLEZCD	GlobalFiler™ (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	--			--	
KU488N	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	
KV3RE3	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
L6XQF3	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
LBBZVW	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
M4ZX2V	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

MANMFD	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
MEMAGY	PowerPlex® Fusion 6C (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					
MNA4X3	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
MP4J4M	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	
MYNUA8	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
NBYN2C	NGM SElect (ReliCalc)					
	15,17.3	23,24	9,13	16,17		
4		12,15	15,15	17,23		9,11
	12,20	14,14.2	27,29	11,16	X,X	
	21,25			17,29.2	8,9	
	15,17					
NEGFBY	PowerPlex® Fusion 6C (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17					

TABLE 1

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

P32E9R	PowerPlex® Fusion					
4	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
PJ96B3	PowerPlex® Fusion 6C					
4	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
QW72MV	GlobalFiler™					
4	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	
RDQ8F7	GlobalFiler™ (STRmix)					
4	15,17.3	23,24	9,13	16,17	12,13	--
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	--	--	17,29.2	8,9	8,10
	15,17	--	--	--	--	
RRRJAK	GlobalFiler™ (STRmix v 2.5.11)					
4	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
RZRH3Z	PowerPlex® Fusion 6C					
4	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
TP6XWT	GlobalFiler™					
4	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

TABLE 1

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

TUXZ2T	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
TV6NET	PowerPlex® Fusion 5C					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
UQQP2Q	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
UV637J	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	No results			No results	
V4UB3U	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
VF4VJ2	GlobalFiler™ Express					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
VLT9KP	PowerPlex® Fusion					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				

TABLE 1

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

W88HYT	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
WL8CE8	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
WQYJUV	GlobalFiler™ (STRmix)					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
WYULYR	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
WZC9YV	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
X7YULT	PowerPlex® Fusion 6C					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25	9,13	5,18	17,29.2	8,9	8,10
	15,17	NR	NR	NR		
XB3T8X	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NM			NM	

TABLE 1

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

XFWM8J	PowerPlex® Fusion					
4	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				
XMHEZ7	Investigator® 24plex QS					
4	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
XPPUAX	PowerPlex® ESX17 Fast System					
4	15,17.3	23,24	9,13	16,17		
		12,15	15,15	17,23		9,11
	12,20	14,14.2	27,29	11,16	X,X	
	21,25			17,29.2	8,9	
	15,17					
XRCFVU	GlobalFiler™					
4	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
Y4ZUG9	PowerPlex® Fusion 5C					
4	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17					
YCVWMQ	GlobalFiler™ (STRmix)					
4	15,17.3	23,24	9,13	16,17	12,13	
	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
YHF2BK	PowerPlex® Fusion					
4	15,17.3	23,24	9,13	16,17	12,13	
	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17	NR				

TABLE 1

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

---

YP2NPX	PowerPlex® Fusion					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25	9,13	5,18		8,9	8,10
	15,17					
YW69QE	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
YZ7E6K	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
Z6QEJK	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					
ZMURHZ	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8,8	12,15	15,15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X,X	10,13
	21,25			17,29.2	8,9	8,10
	15,17	NR			NR	
ZN38MK	GlobalFiler™					
	15,17.3	23,24	9,13	16,17	12,13	
4	8	12,15	15	17,23	11,12	9,11
	12,20	14,14.2	27,29	11,16	X	10,13
	21,25			17,29.2	8,9	8,10
	15,17					

# YSTR Amplification Kit(s) & Results

TABLE 2

WebCode	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
<b>Item 1 - YSTR Results</b>										
27LWHJ	Yfiler™									
		14	11,14		13	29	24	11	13	14
1		15	12	13	19		15	16		
							23		12	
2WDNVL	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12
6TGBLP	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12
79U2ZH	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12
7Z4ZYD	PowerPlex® Y 23									
			14	11,14	13	29	24	11	13	14
1		15	12	13	19		15	16		23
			12	13	19	17		23	11	12
8ZCWLW	Yfiler™									
			14	11,14	13	29	24	11	13	14
1		15	12	13	19		15	16		
							23		12	
A6XPT9	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12
AELME8	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12
AHMNJB	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12
BCRDHB	Yfiler™									
			14	11,14	13	29	24	11	13	14
1		15	12	13	19		15	16		
							23		12	
C8LCJ8	Yfiler™									
			14	11,14	13	29	24	11	13	14
1		15	12	13	19		15	16		
							23		12	

TABLE 2

<b>WebCode</b>		<b>Amplification Kit</b>								
<b>Item</b>	<b>DYF387S1</b>	<b>DYS19</b>	<b>DYS385</b>	<b>DYS389-I</b>	<b>DYS389-II</b>	<b>DYS390</b>	<b>DYS391</b>	<b>DYS392</b>	<b>DYS393</b>	
	<b>DYS437</b>	<b>DYS438</b>	<b>DYS439</b>	<b>DYS448</b>	<b>DYS449</b>	<b>DYS456</b>	<b>DYS458</b>	<b>DYS460</b>	<b>DYS481</b>	
	<b>DYS518</b>	<b>DYS533</b>	<b>DYS549</b>	<b>DYS570</b>	<b>DYS576</b>	<b>DYS627</b>	<b>DYS635</b>	<b>DYS643</b>	<b>DYS481</b>	<b>Y GATA H4</b>
<b>Item 1 - YSTR Results</b>										
CKLWKQ	Yfiler™									
		14	11,14	13	29	24	11	13	14	
1	15	12	13	19		15	16			
						23			12	
CZF7LB	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1	15	12	13	19	32	15	16	11	23	
		39	12		19	17	21	23		12
D8CPW6	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1	15	12	13	19	32	15	16	11	23	
		39	12		19	17	21	23		12
DWYWTA	Yfiler™									
		14	11,14	13	29	24	11	13	14	
1	15	12	13	19		15	16			
						23			12	
F3UYTL	Yfiler™ Plus									
		36,36	14	11,14	13	29	24	11	13	14
1	15	12	13	19	32	15	16	11	23	
		39	12		19	17	21	23		12
F8M4LQ	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1	15	12	13	19	32	15	16	11	23	
		39	12		19	17	21	23		12
G2DCNC	Yfiler™									
		14	11,14	13	29	24	11	13	14	
1	15	12	13	19		15	16			
						23			12	
GP3XMY	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1	15	12	13	19	32	15	16	11	23	
		39	12		19	17	21	23		12
GZJJWZ	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1	15	12	13	19	32	15	16	11	23	
		39	12		19	17	21	23		12
KV3RE3	Yfiler™									
		14	11,14	13	29	24	11	13	14	
1	15	12	13	19		15	16			
						23			12	
LBBZVW	Yfiler™									
		14	11,14	13	29	24	11	13	14	
1	15	12	13	19		15	16			
						23			12	
M4ZX2V	Yfiler™ Plus									
		36	14	11,14	13	29	24	11	13	14
1	15	12	13	19	32	15	16	11	23	
		39	12		19	17	21	23		12

TABLE 2

<b>WebCode</b>		<b>Amplification Kit</b>								
<b>Item</b>	<b>DYF387S1</b>	<b>DYS19</b>	<b>DYS385</b>	<b>DYS389-I</b>	<b>DYS389-II</b>	<b>DYS390</b>	<b>DYS391</b>	<b>DYS392</b>	<b>DYS393</b>	
	<b>DYS437</b>	<b>DYS438</b>	<b>DYS439</b>	<b>DYS448</b>	<b>DYS449</b>	<b>DYS456</b>	<b>DYS458</b>	<b>DYS460</b>	<b>DYS481</b>	
	<b>DYS518</b>	<b>DYS533</b>	<b>DYS549</b>	<b>DYS570</b>	<b>DYS576</b>	<b>DYS627</b>	<b>DYS635</b>	<b>DYS643</b>	<b>Y GATA H4</b>	
<b>Item 1 - YSTR Results</b>										
MNA4X3	Yfiler™									
1	14 15	11,14 12	13 13	13 19	29	24	11	13	14	12
MYNUA8										
1	14 15	11,14 12	13 13	13 19	29	24	11	13	14	12
NBYN2C	PowerPlex® Y 23									
1	14 15 12	11,14 12 13	13 19	29	24	11	13	14	23	12
NEGFBY	PowerPlex® Y 23									
1	14 15 12	11,14 12 13	13 19	29	24	11	13	14	23	12
P32E9R	Yfiler™ Plus									
1	36 15 39	14 12 12	11,14 13 19	13 19	29	24	11	13	14	23
PJ96B3	Yfiler™									
1	14 15	11,14 12	13 13	13 19	29	24	11	13	14	12
QW72MV	Yfiler™									
1	14 15	11,14 12	13 13	13 19	29	24	11	13	14	12
RZRH3Z	Yfiler™									
1	14 15	11,14 12	13 13	13 19	29	24	11	13	14	12
TP6XWT	Yfiler™									
1	14 15	11,14 12	13 13	13 19	29	24	11	13	14	12
TV6NET	Yfiler™ Plus									
1	36 15 39	14 12 12	11,14 13 19	13 19	29	24	11	13	14	12
UQQP2Q	Yfiler™ Plus									
1	36 15 39	14 12 12	11,14 13 19	13 19	29	24	11	13	14	12
V4UB3U	Yfiler™ Plus									
1	36 15 39	14 12 12	11,14 13 19	13 19	29	24	11	13	14	12

TABLE 2

<b>WebCode</b>		<b>Amplification Kit</b>								
<b>Item</b>	<b>DYF387S1</b>	<b>DYS19</b>	<b>DYS385</b>	<b>DYS389-I</b>	<b>DYS389-II</b>	<b>DYS390</b>	<b>DYS391</b>	<b>DYS392</b>	<b>DYS393</b>	
	<b>DYS437</b>	<b>DYS438</b>	<b>DYS439</b>	<b>DYS448</b>	<b>DYS449</b>	<b>DYS456</b>	<b>DYS458</b>	<b>DYS460</b>	<b>DYS481</b>	
	<b>DYS518</b>	<b>DYS533</b>	<b>DYS549</b>	<b>DYS570</b>	<b>DYS576</b>	<b>DYS627</b>	<b>DYS635</b>	<b>DYS643</b>	<b>Y GATA H4</b>	
<b>Item 1 - YSTR Results</b>										
VLT9KP	Yfiler™ Plus									
1	36	14	11,14	13	29	24	11	13	14	
	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
WL8CE8	Yfiler™ Plus									
1	36	14	11,14	13	29	24	11	13	14	
	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
WYULYR	Yfiler™ Plus									
1	36	14	11,14	13	29	24	11	13	14	
	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
X7YULT	Yfiler™									
1		14	11,14	13	29	24	11	13	14	
	15	12	13	19		15	16			
							23		12	
XB3T8X	Yfiler™									
1		14	11,14	13	29	24	11	13	14	
	15	12	13	19		15	16			
							23		12	
XEVUXZ	Yfiler™									
1		14	11,14	13	29	24	11	13	14	
	15	12	13	19		15	16			
							23		12	
XFWM8J	Yfiler™ Plus									
1	36	14	11,14	13	29	24	11	13	14	
	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
XMHEZ7	Yfiler™									
1	36	14	11,14	13	29	24	11	13	14	
	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
YHF2BK	Yfiler™ Plus									
1	36	14	11,14	13	29	24	11	13	14	
	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
Z4JE6X	Yfiler™									
1		14	11,14	13	29	24	11	13	14	
	15	12	13	19		15	16			
							23		12	
ZN38MK	Yfiler™ Plus									
1	36	14	11,14	13	29	24	11	13	14	
	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	

TABLE 2

WebCode		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	DYS481	Y GATA H4
Item 3 - YSTR Results										
27LWHJ	Yfiler™		14	11,14	13	29	24	11	13	14
3	15	12	13	19		15	16			12
2WDNVL	Yfiler™ Plus		36	14	11,14	13	29	24	11	13
3	15	12	13	19	32	15	16	11	11	23
	39	12		19	17	21	23			12
6TGBLP	Yfiler™ Plus		36	14	11,14	13	29	24	11	13
3	15	12	13	19	32	15	16	11	11	23
	39	12		19	17	21	23			12
79U2ZH	Yfiler™ Plus		36	14	11,14	13	29	24	11	13
3	15	12	13	19	32	15	16	11	11	23
	39	12		19	17	21	23			12
7Z4ZYD	PowerPlex® Y 23			14	11,14	13	29	24	11	13
3	15	12	13	19		15	16			23
		12	13	19	17		23	11	11	12
8ZCWLW	Yfiler™			14	11,14	13	29	24	11	13
3	15	12	13	19		15	16			14
						23				12
A6XPT9	Yfiler™ Plus		36	14	11,14	13	29	24	11	13
3	15	12	13	19	32	15	16	11	11	23
	39	12		19	17	21	23			12
AELME8	Yfiler™ Plus		36	14	11,14	13	29	24	11	13
3	15	12	13	19	32	15	16	11	11	23
	39	12		19	17	21	23			12
AHMNJB	Yfiler™ Plus		36	14	11,14	13	29	24	11	13
3	15	12	13	19	32	15	16	11	11	23
	39	12		19	17	21	23			12
BCRDHB	Yfiler™			14	11,14	13	29	24	11	13
3	15	12	13	19		15	16			14
						23				12
C8LCJ8	Yfiler™			14	11,14	13	29	24	11	13
3	15	12	13	19		15	16			14
						23				12
CZF7LB	Yfiler™ Plus		36	14	11,14	13	29	24	11	13
3	15	12	13	19	32	15	16	11	11	23
	39	12		19	17	21	23			12

TABLE 2

WebCode		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	DYS481	Y GATA H4
Item 3 - YSTR Results										
D8CPW6	Yfiler™ Plus									
	36	14	11,14	13	29	24	11	13	14	
3	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
F3UYTL	Yfiler™ Plus									
	36,36	14	11,14	13	29	24	11	13	14	
3	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
F8M4LQ	Yfiler™ Plus									
	36	14	11,14	13	29	24	11	13	14	
3	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
G2DCNC	Yfiler™									
		14	11,14	13	29	24	11	13	14	
3	15	12	13	19		15	16			
						23			12	
GP3XMY	Yfiler™ Plus									
	36	14	11,14	13	29	24	11	13	14	
3	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
GZJJWZ	Yfiler™ Plus									
	36	14	11,14	13	29	24	11	13	14	
3	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
KV3RE3	Yfiler™									
		14	11,14	13	29	24	11	13	14	
3	15	12	13	19		15	16			
						23			12	
LBBZVW	Yfiler™									
		14	11,14	13	29	24	11	13	14	
3	15	12	13	19		15	16			
						23			12	
M4ZX2V	Yfiler™ Plus									
	36	14	11,14	13	29	24	11	13	14	
3	15	12	13	19	32	15	16	11	23	
	39	12		19	17	21	23		12	
MNA4X3	Yfiler™									
		14	11,14	13	29	24	11	13	14	
3	15	12	13	19		15	16			
						23			12	
MYNUA8	Yfiler™									
		14	11,14	13	29	24	11	13	14	
3	15	12	13	19		15	16			
						23			12	
NBYN2C	PowerPlex® Y 23									
		14	11,14	13	29	24	11	13	14	
3	15	12	13	19		15	16			
		12	13	19	17		23	11	12	

TABLE 2

WebCode		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	DYS481	Y GATA H4
Item 3 - YSTR Results										
NEGFBY	PowerPlex® Y 23		14	11,14	13	29	24	11	13	14
3	15	12	13	19		15	16			23
		12	13	19	17		23	11		12
P32E9R	Yfiler™ Plus		36	14	11,14	13	29	24	11	13
3	15	12	13	19	32	15	16	11		14
	39	12		19	17	21	23			23
										12
PJ96B3	Yfiler™			14	11,14	13	29	24	11	13
3	15	12	13	19		15	16			14
							23			12
QW72MV	Yfiler™			14	11,14	13	29	24	11	13
3	15	12	13	19		15	16			14
							23			12
RZRH3Z	Yfiler™			14	11,14	13	29	24	11	13
3	15	12	13	19		15	16			14
							23			12
TP6XWT	Yfiler™			14	11,14	13	29	24	11	13
3	15	12	13	19		15	16			14
							23			12
TV6NET	Yfiler™ Plus			36	14	11,14	13	29	24	11
3	15	12	13	19		32	15	16	13	14
	39	12		19	17	21	23			23
										12
UQQP2Q	Yfiler™ Plus			36	14	11,14	13	29	24	11
3	15	12	13	19		32	15	16	13	14
	39	12		19	17	21	23			11
										23
V4UB3U	Yfiler™ Plus			36	14	11,14	13	29	24	11
3	15	12	13	19		32	15	16	13	14
	39	12		19	17	21	23			11
										23
VLT9KP	Yfiler™ Plus			36	14	11,14	13	29	24	11
3	15	12	13	19		32	15	16	13	14
	39	12		19	17	21	23			11
										23
WL8CE8	Yfiler™ Plus			36	14	11,14	13	29	24	11
3	15	12	13	19		32	15	16	13	14
	39	12		19	17	21	23			11
										23
WYULYR	Yfiler™ Plus			36	14	11,14	13	29	24	11
3	15	12	13	19		32	15	16	13	14
	39	12		19	17	21	23			11
										23
										12

TABLE 2

WebCode      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										
X7YULT	Yfiler™									
3		14	11,14	13	29	24	11	13	14	
		15	12	13	19	15	16			
						23			12	
XB3T8X	Yfiler™									
3		14	11,14	13	29	24	11	13	14	
		15	12	13	19	15	16			
						23			12	
XFWM8J	Yfiler™ Plus									
3		36	14	11,14	13	29	24	11	13	14
		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12
XMHEZ7										
3		36	14	11,14	13	29	24	11	13	14
		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12
YHF2BK	Yfiler™ Plus									
3		36	14	11,14	13	29	24	11	13	14
		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12
ZN38MK	Yfiler™ Plus									
3		36	14	11,14	13	29	24	11	13	14
		15	12	13	19	32	15	16	11	23
		39	12		19	17	21	23		12

TABLE 2

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

**Item 4 - YSTR Results**

27LWHJ      Yfiler™

4

4	
---	--

AELME8      Yfiler™ Plus

NR								
4	NR							
	NR	NR		NR	NR	NR		NR

C8LCJ8      Yfiler™

4

4	
---	--

D8CPW6      Yfiler™ Plus

NR								
4	NR							
	NR	NR		NR	NR	NR		NR

F8M4LQ      Yfiler™ Plus

NR								
4	NR							
	NR	NR		NR	NR	NR		NR

P32E9R      Yfiler™ Plus

NR								
4	NR							
	NR	NR		NR	NR	NR		NR

TP6XWT      Yfiler™

4

4	
---	--

TV6NET      Yfiler™ Plus

NR								
4	NR							
	NR	NR		NR	NR	NR		NR

VLT9KP      Yfiler™ Plus

NR								
4	NR							
	NR	NR		NR	NR	NR		NR

XFWM8J      Yfiler™ Plus

NR								
4	NR							
	NR	NR		NR	NR	NR		NR

YHF2BK      Yfiler™ Plus

NR								
4	NR							
	NR	NR		NR	NR	NR		NR

## **Additional DNA Results**

TABLE 3

Additional DNA results found to be concordant at a pre-existing locus are retained solely within the applicable tables. Non-concordant results and results for loci not found elsewhere will remain in this table.

Locus	WebCode	Item 1	Item 2	Item 3	Item 3e	Item 3sp	Item 4	Item 4e	Item 4sp
-------	---------	--------	--------	--------	---------	----------	--------	---------	----------

No additional DNA results were reported.

# DNA Interpretations

*Based on results obtained from DNA analysis, could the Victim (Item 1) and/or the Suspect (Item 2) be a contributor to the questioned stains (Items 3 & 4)?*

TABLE 4

WebCode	Victim (Item 1)		Suspect (Item 2)		WebCode	Victim (Item 1)		Suspect (Item 2)	
	Item 3	Item 4	Item 3	Item 4		Item 3	Item 4	Item 3	Item 4
27LWHJ	No Interpretations Reported, DNA Analyzed for Database purposes only.				98MVD6	Yes	No	No	Yes
2UPTAJ	Yes	No	No	Yes	A6XPT9	Yes	No	No	Yes
2V2VXX	Yes	No	No	Yes	AELME8	Yes	No	No	Yes
2WDNVL	Yes	No	No	Yes	AHMNJB	Yes	No	No	Yes
44MZJU	Yes	No	No	Yes	B939C8	No Interpretations Reported, DNA Analyzed for Database purposes only.			
4YURH9	Yes	No	No	Yes	BCRDHB	Yes	No	No	Yes
6448RX	Yes	No	No	Yes	C8LCJ8	No Interpretations Reported, DNA Analyzed for Database purposes only.			
69EHKF	Yes	No	No	Yes	CKAHC2	Yes	No	No	Yes
69F9RV	No Interpretations Reported, DNA Analyzed for Database purposes only.				CKLWKQ	No Interpretations Reported, DNA Analyzed for Database purposes only.			
6NTL7L	Yes	No	No	Yes	CWY2RL	Yes	No	No	Yes
6PY9HQ	Yes	No	No	Yes	CX9VNL	Yes	No	No	Yes
6TGBLP	Yes	No	No	Yes	CZF7LB	Yes	No	No	Yes
6WMRYM	Yes	No	No	Yes	D8CPW6	Yes	No	No	Yes
79U2ZH	Yes	No	No	Yes	DMNWGG	No Interp	No Interp	No Interp	No Interp
7A86TF	No Interpretations Reported, DNA Analyzed for Database purposes only.				DWYWTA	No Interpretations Reported, DNA Analyzed for Database purposes only.			
7K7BLM	Yes	No	No	Yes	EVZHYJ	Yes	No	No	Yes
7Z4ZYD	Yes	No	No	Yes	F3UYTL	Yes	No	No	Yes
8P6FGB	Yes	No	No	Yes	F8M4LQ	Yes	No	No	Yes
8ZCWLN	Yes	No	No	Yes	FP8BW8	Yes	No	No	Yes
97EG9K	Yes	No	No	Yes	FVUHFV	Yes	No	No	Yes

TABLE 4

<u><b>WebCode</b></u>	<u><b>Victim (Item 1)</b></u>		<u><b>Suspect (Item 2)</b></u>		<u><b>WebCode</b></u>	<u><b>Victim (Item 1)</b></u>		<u><b>Suspect (Item 2)</b></u>	
	<u><b>Item 3</b></u>	<u><b>Item 4</b></u>	<u><b>Item 3</b></u>	<u><b>Item 4</b></u>		<u><b>Item 3</b></u>	<u><b>Item 4</b></u>	<u><b>Item 3</b></u>	<u><b>Item 4</b></u>
G2DCNC	Yes	No	No	Yes	QW72MV	Yes	No	No	Yes
G82QXD	Yes	No	No	Yes	RDQ8F7	Yes	No	No	Yes
G8GAFP	Yes	No	No	Yes	RRRJAK	Yes	No	No	Yes
GP3XMY	Yes	No	No	Yes	RZRH3Z	Yes	No	No	Yes
GZJJWZ	Yes	No	No	Yes	TP6XWT	No Interpretations Reported, DNA Analyzed for Database purposes only.			
JAFCC4	Yes	No	No	Yes	TUXZ2T	No Interpretations Reported, DNA Analyzed for Database purposes only.			
JLEZCD	Yes	No	No	Yes	TV6NET	Yes	No	No	Yes
KU488N	Yes	No	No	Yes	UQQP2Q	Yes	No	No	Yes
KV3RE3	Yes	No	No	Yes	UV637J	Yes	No	No	Yes
L6XQF3	Yes	No	No	Yes	V4UB3U	Yes	No	No	Yes
LBBZVW	Yes	No	No	Yes	VF4VJ2	Yes	No	No	Yes
M4ZX2V	Yes	No	No	Yes	VLT9KP	Yes	No	No	Yes
MANMFD	Yes	No	No	Yes	W88HYT	Yes	No	No	Yes
MEMAGY	Yes	No	No	Yes	WKVF8H	No Interpretations Reported, DNA Analyzed for Database purposes only.			
MNA4X3	Yes	No	No	Yes	WL8CE8	Yes	No	No	Yes
MP4J4M	Yes	No	No	Yes	WQYJUV	Yes	No	No	Yes
MYNUA8	Yes	No	No	Yes	WYULYR	Yes	No	No	Yes
NBYN2C	Yes	No	No	Yes	WZC9YV	No Interp	No Interp	No Interp	No Interp
NEGFBY	Yes	No	No	Yes	X7YULT	Yes	No	No	Yes
P32E9R	Yes	No	No	Yes	XB3T8X	Yes	No	No	Yes
PJ96B3	Yes	No	No	Yes	XEVUXZ	No Interpretations Reported, DNA Analyzed for Database purposes only.			

TABLE 4

<u><b>WebCode</b></u>	<u><b>Victim (Item 1)</b></u>		<u><b>Suspect (Item 2)</b></u>		<u><b>WebCode</b></u>	<u><b>Victim (Item 1)</b></u>		<u><b>Suspect (Item 2)</b></u>	
	<u><b>Item 3</b></u>	<u><b>Item 4</b></u>	<u><b>Item 3</b></u>	<u><b>Item 4</b></u>		<u><b>Item 3</b></u>	<u><b>Item 4</b></u>	<u><b>Item 3</b></u>	<u><b>Item 4</b></u>
XFWM8J	Yes	No	No	Yes					
XMHEZ7	Yes	No	No	Yes					
XPPUAX	Yes	No	No	Yes					
XRCFVU	Yes	No	No	Yes					
Y4ZUG9	Yes	No	No	Yes					
YCVWMQ	Yes	No	No	Yes					
YHF2BK	Yes	No	No	Yes					
YP2NPX	Yes	No	No	Yes					
YW69QE	Yes	No	No	Yes					
YZ7E6K	No Interpretations Reported, DNA Analyzed for Database purposes only.								
Z4JE6X	No Interpretations Reported, DNA Analyzed for Database purposes only.								
Z6QEJK	Yes	No	No	Yes					
ZMURHZ	Yes	No	No	Yes					
ZN38MK	Yes	No	No	Yes					

**DNA Interpretation****Response Summary****Participants reporting DNA results: 96**

Based on results obtained from DNA analysis, could the Victim (Item 1) and/or the Suspect (Item 2) be a contributor to the questioned stains (Items 3 & 4)?

	Victim (Item 1)		Suspect (Item 2)	
	<u><b>Item 3</b></u>	<u><b>Item 4</b></u>	<u><b>Item 3</b></u>	<u><b>Item 4</b></u>
Yes	<b>81</b>	<b>0</b>	<b>0</b>	<b>81</b>
No	<b>0</b>	<b>81</b>	<b>81</b>	<b>0</b>
Inc	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
No Interpretation	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
No Response	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Participants analyzing DNA for database purposes only: 13

## **Additional Comments**

TABLE 5

WebCode	Additional Comments
8ZCWLN	Extraction: - Item 1 and Item 2 were extracted using in-situ method. Item 3 and Item 4 were extracted using QIAAsymphony DNA Investigator Kit via QIAAsymphony SP. Quantification: - Item 3 and Item 4 were quantified using Applied Biosystem Quantifiler Trio DNA Quantification kit on QuantStudio 5. Amplification: - Item 1 and Item 2 were amplified using GlobalFiler Express Amplification kit on Proflex PCR system. Item 3 and Item 4 were amplified using GlobalFiler Amplification kit on GeneAmp 9700 system. Item 1 and Item 3 were amplified using Y-Filer Kit on GeneAmp 9700 system. Electrophoresis: - All amplified products were run on Genetic Analyzer 3500XL. Quality Control: - All reagent blank, positive control and negative control, were carried out throughout the analysis and all gave intended results. Remarks: - NM : Non-male profile.
AELME8	NR = NO RESULTS. STRmix Analysis was conducted on this test. Data reported from this test is from using GeneMapper ID-X.
BCRDHB	Extraction: Item 1 & Item 2 were extracted using in-situ method. Item 3 & Item 4 were extricated using QIAAsymphony DNA Investigator Kit via QIAAsymphony SP Platform. Quantification : Item 3 & Item 4 were quantified using Quantifiler Trio DNA kit on RT-PCR QuanStudio 5 System. Amplification : Item 1 & Item 2 were amplified using GlobalFiler Express Kit on Proflex PCR System. Item 3 & Item 4 were amplified using GlobalFler Kit on 9700 GeneAmp PCR System. Y-STR amplification was carried out on Item 1 & Item 3 using AmpFISTR Y-Filer Kit on 9700 GeneAmp PCR System. Electrophoresis : Electrophoresis for Item 1 & Item 2 (GlobalFiler Express) , Item 3 & Item 4 (GlobalFiler) and Item 1 & Item 3 (Y-Filer) were carried out on Genetic Analyzer 3500xl. Quality Control : Reagent Blank, Positive & Negative Control were incorporated throughout analysis add all gave intended results. NM : Non male profile.
CKLWKQ	NR=No Result. No Comparisons Performed.
CWY2RL	STRmix analysis was conducted on this test.
D8CPW6	-The data reported out in this test is from analysis using GeneMapper ID-X. -STRmix analysis was conducted on this test. -NR = No results.
DMNWGG	test participant functions as Y-screen technician and does not perform interpretations
DWYWTA	No comparisons performed. NR = No results
EVZHYJ	Blank spaces in the STR results table indicate that results were not obtained at that locus.
F3UYTL	NR = No DNA Result
F8M4LQ	NR = No Results. Samples analyzed and reported using Genemapper ID-X. STRmix analysis was conducted on this test.
G2DCNC	Extraction: Item 1 and Item 2 were extracted using in-situ method while Item 3 and Item 4 were extracted using Chelex extraction method. Quantification: DNA quantitation for Item 3 and Item 4 were carried out using the Quantifiler Human DNA Quantification kit with Applied Biosystem QuantStudio 5 Real-Time PCR System. Amplification: Item 1 and Item 2 were amplified using GlobalFiler Express PCR Amplification kit, while Item 3 and Item 4 were amplified using GlobalFiler PCR Amplification kit on 9700 GeneAmp PCR System. Y-STR (Y-Short Tandem Repeat) amplification was carried out on Item 1 and Item 3 using AmFISTR Y-Filer kit on 9700 GeneAmp PCR System. Electrophoresis: Electrophoresis was carried out on Genetic Analyzer 3500xl for Item 1 and Item 2 (GlobalFiler Express) and Item 3 and Item 4 (GlobalFiler). Electrophoresis for Y-Filer was carried out on Genetic Analyzer 3500xl for Item 1 and Item 3. Quality Control: Reagent blank, Positive Control and Negative Control were carried out through analysis and all gave intended results. Abbreviation: NM: Non-male Profile
JLEZCD	STRmix analysis was conducted on this test.
KU488N	NR= no DNA results
KV3RE3	NR=No Result

TABLE 5

WebCode	Additional Comments
LBBZVW	NR = No Results
MNA4X3	NR=No Result
MP4J4M	NR = No DNA Result
MYNUA8	Extraction: Item 3 and Item 4 were extracted using Chelex Extraction. Quantification: Item 3 and Item 4 were quantified using Quantifiler Human Quantification Kit and carried out by 7500 ABI Real-Time PCR. Amplification: -Item 1 and Item 2 were amplified using Globalfiler Express PCR Amplification Kit on 9700 GeneAmp PCR System. -Item 3 and Item 4 were amplified using Globalfiler PCR Amplification Kit on 9700 GeneAmp PCR System. -Item 1 and Item 3 were amplified using AMPFISTR Yfiler Kit on 9700 GeneAmp PCR System. Electrophoresis: The electrophoresis process was carried out by Genetic Analyzer 3500xL for Item1, Item 2, Item 3 and Item 4. Quality Control: Reagent blank, positive control and negative control were carried out along with the analysis and all gave the intended results. *NM denotes non-male DNA profile
P32E9R	NR = no results. STRmix analysis was conducted on this test. The data reported out in this test is from analysis using GeneMapper ID-X.
PJ96B3	NR = No Results
QW72MV	Extraction: Item 1 and Item 2 were extracted using in-situ method. Item 3 and Item 4 were extracted using QIAsymphony DNA Investigator KIT via QIAsymphony SP. Quantification: Item 3 and Item 4 were quantified using ABI Quantifiler Trio DNA Quantification Kit on ABI QuantStudio 5 Real-Time PCR System. Amplification: Item 1 and Item 2 were amplified using GlobalFiler Express PCR Amplification Kit on Proflex PCR System. Item 3 and Item 4 were amplified using GlobalFiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Item 1 and Item 3 were amplified using AmpFLSTR Yfiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Electrophoresis: Electrophoresis were carried out on ABI 3500xL Genetic Analyzer for Item 1, Item 2, Item 3 and Item 4. Quality Control: Reagent Blank, Positive Control and Negative Control were carried out through analysis and all gave intended results.
RDQ8F7	STRmix analysis was conducted on this test.
RZRH3Z	NR=No Results
TV6NET	STRmix analysis was conducted on Item 3. Reported data was analyzed using GeneMapper ID-X. NR = No Results.
VLT9KP	NR = No Results. STRmix analysis was conducted on this test. All results were reported using Genemapper ID-X.
WZC9YV	test participant functions as Y-screen technician and does not perform interpretations
X7YULT	NR = No Result
XB3T8X	Extraction: Item 1 and Item 2 were extracted using in-situ method. Item 3 and Item 4 were extracted using QIAsymphony DNA Investigator KIT via QIAsymphony SP. Quantification: Item 3 and Item 4 were quantified using ABI Quantifiler Trio DNA Quantification Kit on ABI QuantStudio 5 Real-Time PCR System. Amplification: Item 1 and Item 2 were amplified using GlobalFiler Express PCR Amplification Kit on Proflex PCR System. Item 3 and Item 4 were amplified using GlobalFiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Item 1 and Item 3 were amplified using AmpFLSTR Yfiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Electrophoresis: Electrophoresis were carried out on ABI 3500xL Genetic Analyzer for Item 1, Item 2, Item 3 and Item 4. Quality Control: Reagent Blank, Positive Control and Negative Control were carried out through analysis and all gave intended results.
XEVUXZ	NR = No Results. No comparisons made.
XFWMBJ	STRmix analysis was conducted on this test. The data reported in this test is from analysis using GeneMapper ID-X. NR = no results

TABLE 5

WebCode	Additional Comments
XPPUAX	Both questioned stains in items 3 and 4 tested positive for blood using Leucomalachite green (LM) test.
YCVWMQ	STRmix analysis was conducted on this test.
YHF2BK	NR = No Results. The data reported out in this test is from analysis using GeneMapper ID-X. STRmix analysis was conducted on Item 4 of this test.
Z4JE6X	NR = No Result. No comparisons performed.

-End of Report-  
(Appendix may follow)

**Collaborative Testing Services ~ Forensic Testing Program**

**Test No. 23-5803: DNA-Blood**

**DATA MUST BE SUBMITTED BY June 20, 2023, 11:59 p.m. EDT TO BE INCLUDED IN THE REPORT**

Participant Code: U1234A

WebCode: ZV4UHC

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:**

Police are investigating an assault involving a male victim and female suspect. The victim reported to police that the suspect punched him many times in the face, causing him to bleed. In an attempt to escape, he hit the suspect with his backpack. The suspect has been apprehended by police. Police are submitting to your laboratory a stain from the shirt the victim was wearing (Item 3) and a stain from the shirt the suspect was wearing (Item 4). Screening tests have been performed on both samples with the following results: Item 3 (victim's shirt) is positive for blood, and Item 4 (suspect's shirt) is positive for blood. Also collected were known blood samples from the male victim (Item 1) and the female suspect (Item 2).

**Items Submitted (Sample Pack S3):**

Item 1: Known blood from the male victim

Item 2: Known blood from the female suspect

Item 3: Questioned blood stain from victim's shirt (off-white)

Item 4: Questioned blood stain from suspect's shirt (yellow)

### *Part I: DNA Results for Known Item 1*

- Report alleles in numerical order, separated by a comma.
  - Follow your laboratory procedures for reporting homozygotes (i.e. X,X or X) and null responses.
  - If your laboratory policy is to indicate minor or weaker alleles, please enclose them within brackets [ ].

**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.*

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

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

YFiler™  PowerPlex® Y  Other

*Alleles below are sorted in Default order.*

**Part I (continued): DNA Results for Known Item 2**

- Report alleles in numerical order, separated by a comma.
- Follow your laboratory procedures for reporting homozygotes (i.e. X,X or X) and null responses.
- If your laboratory policy is to indicate minor or weaker alleles, please enclose them within brackets [ ].

**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 Results for Questioned Item 3**

- Report alleles in numerical order, separated by a comma.
  - Follow your laboratory procedures for reporting homozygotes (i.e. X,X or X) and null responses.
  - If your laboratory policy is to indicate minor or weaker alleles, please enclose them within brackets [ ].

**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®
- PowerPlex®

GlobalFiler™

## Investigator® 24plex

Report the Probabilistic Genotyping Software Used (if applicable):

*Alleles below are sorted in Default order.*

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

**YSTR Amplification Kit(s) Used:**

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

YFiler™

 PowerPlex® Y

Other

*Alleles below are sorted in Default order.*

**Part I (continued): DNA Results for Questioned Item 4**

- Report alleles in numerical order, separated by a comma.
  - Follow your laboratory procedures for reporting homozygotes (i.e. X,X or X) and null responses.
  - If your laboratory policy is to indicate minor or weaker alleles, please enclose them within brackets [ ].

**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.).

 Identifier®

 GlobalFiler™

 Investigator® 24plex

 PowerPlex®

Other

Report the Probabilistic Genotyping Software Used (if applicable):

*Alleles below are sorted in Default order.*

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

**YSTR Amplification Kit(s) Used:**

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

 YFiler™

 PowerPlex® Y

Other

*Alleles below are sorted in Default order.*

**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.
- If your laboratory policy is to indicate minor or weaker alleles, please enclose them within brackets [ ].
- Click "Add Row" to show another row of boxes for entry.

Locus	Item 1	Item 2	Item 3	Item 4

## Part II: DNA INTERPRETATION

Based on results obtained from DNA analysis, could the Victim (Item 1) and/or the Suspect (Item 2) be a contributor to the questioned stains (Items 3 & 4)?

		<u>Victim (Item 1)</u>		<u>Suspect (Item 2)</u>	
		Item 3	Item 4	Item 3	Item 4
Yes	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
No	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
Inconclusive	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
No Interpretation	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>

DNA interpretations not reported; samples analyzed for database purposes only:

## Part III: ADDITIONAL COMMENTS

- Use this section to report comments regarding any part of this test.
- Written conclusions (including statistical information) for DNA analysis are not required.
- Any interpretations based on the results obtained should be indicated in the section above.
- Note: Laboratories submitting their results for accreditation are asked to report any additional information that will assist in the review of their results. This includes an explanation of any deviations from a full completion of the test and/or unique findings such as elevated stutter.

**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)