



## **DNA-Blood Test No. 17-5803**

### **Summary Report**

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This proficiency test was sent to 128 participants. Each participant received a sample pack consisting of two known bloodstains and two questioned stains which they were requested to analyze using their existing protocols. Data were returned from 110 participants (86% response rate) and are compiled into the following tables:

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

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

## **Manufacturer's Information**

Each sample pack consisted of two known bloodstains on FTA Micro cards (Items 1 & 2), and two questioned stains; one on clean, light purple material (Item 3) and one on clean, light blue material (Item 4). Participants were requested to analyze these items using their existing protocols.

**SAMPLE PREPARATION:** All stains were prepared from human whole blood which was either drawn into citric acid preservative blood bags or EDTA tubes. Items 1 (75  $\mu$ l) and 4 (50  $\mu$ l) were both created using blood collected from the same female donor. Items 2 (75  $\mu$ l) and 3 (50  $\mu$ l) were both created using blood collected from the same male 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 17, 2017 following receipt of predistribution results.

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

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

## Manufacturer's Information, continued

<b>Amelogenin and STR Results</b>										
<i>Results compiled from predistribution laboratories and a consensus of at least 10 participants.</i>										
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818				
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391				
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482				
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D				
	Penta E	SE33	TH01	TPOX	vWA					
1	14,16	23,24	10,11.3	16,18	*	11,13				
	*	8,12	14,16	*	14,15	18,20				
	9,11	11,13	*	12,14	14,15.2	*				
	30,31.2	11,15	X,X	10,13	22,24	9,9				
	7,10	16,23.2	7,9.3	10,12	15,17					
2	12,17	16,18	11,14	15,15	*	12,13				
	*	10,10	14,15	*	13,17	16,19				
	12,14	9,14	*	17,19	13.2,14	*				
	29,31	17,17	X,Y	10,11	23,24	11,11				
	5,5	19,29.2	7,7	8,11	17,17					
3	12,17	16,18	11,14	15,15	*	12,13				
	*	10,10	14,15	*	13,17	16,19				
	12,14	9,14	*	17,19	13.2,14	*				
	29,31	17,17	X,Y	10,11	23,24	11,11				
	5,5	19,29.2	7,7	8,11	17,17					
4	14,16	23,24	10,11.3	16,18	*	11,13				
	*	8,12	14,16	*	14,15	18,20				
	9,11	11,13	*	12,14	14,15.2	*				
	30,31.2	11,15	X,X	10,13	22,24	9,9				
	7,10	16,23.2	7,9.3	10,12	15,17					

  

<b>YSTR Results</b>										
<i>Results compiled from predistribution laboratories and a consensus of at least 10 participants.</i>										
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	DYS437
	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4
2	*	16	15,17	14	32	23	10	11	13	14
	11	12	21	*	15	16	*	25	*	*
	*	11	11	14	15	*	*	22	13	10
3	*	16	15,17	14	32	23	10	11	13	14
	11	12	21	*	15	16	*	25	*	*
	*	11	11	14	15	*	*	22	13	10

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

## **Summary Comments**

The DNA-Blood test is part of the DNA Sample Specific Series, where participants are advised of the body fluid(s) that make up the questioned stains. This test is designed to allow participants to assess their proficiency in DNA analysis of dried bloodstains, data interpretation and/or reporting conclusions based on typing results. Participants were supplied with two "known" bloodstains (Items 1 and 2) and two "questioned" stains (Items 3 and 4). Items 1 and 4 were each created using blood collected from the same female donor. Items 2 and 3 were each created using blood collected from the same male donor. (See Manufacturer's Information for preparation details)

Of the 110 participants that returned results, 22 did not report DNA interpretations and of those, 21 stated that they analyzed samples for database purposes only.

For the Item 3 stain, all 88 participants excluded the victim (Item 1) and included the suspect (Item 2) as a possible contributor.

For the Item 4 stain, all 88 participants included the victim (Item 1) as a possible contributor and excluded the suspect (Item 2).

No participants reported allelic results that differed from the consensus/predistribution results.

# STR Amplification Kit(s) & Results

## TABLE 1

WebCode	Amplification Kits					
Item	D1S1656 D6S1043	D2S1338 D7S820	D2S441 D8S1179	D3S1358 D9S1122	D4S2408 D10S1248	D5S818 D12S391
	D13S317 D21S11	D16S539 D22S1045	D17S1301 Amelogenin	D18S51 CSF1PO	D19S433 FGA	D20S482 Penta D
	Penta E	SE33	TH01	TPOX	vWA	

### Item 1 - STR Results

2TCKZ8	Identifiler®	23,24	16,18	11,13		
1		8,12	14,16			
		9,11	11,13	12,14	14,15.2	
		30,31.2	X	10,13	22,24	
			7,9.3	10,12	15,17	
<hr/>						
3AVZEM	Identifiler® Plus	23,24	16,18	11,13		
1		8,12	14,16			
		9,11	11,13	12,14	14,15.2	
		30,31.2	X,X	10,13	22,24	
			7,9.3	10,12	15,17	
<hr/>						
3MG9FV	PowerPlex® Fusion 6C	14,16	23,24	10,11.3	16,18	11,13
1		8,12	14,16		14,15	18,20
		9,11	11,13	12,14	14,15.2	
		30,31.2	11,15	X,X	10,13	22,24
		7,10	16,23.2	7,9.3	10,12	15,17
<hr/>						
3U6VBZ	GlobalFiler™	14,16	23,24	10,11.3	16,18	11,13
1		8,12	14,16		14,15	18,20
		9,11	11,13	12,14	14,15.2	
		30,31.2	11,15	X	10,13	22,24
			16,23.2	7,9.3	10,12	15,17
<hr/>						
3VXR9	NGM SElect	14,16	23,24	10,11.3	16,18	
1			14,16		14,15	18,20
			11,13	12,14	14,15.2	
		30,31.2	11,15	X,X	22,24	
			16,23.2	7,9.3	15,17	
<hr/>						
3X62RR	PowerPlex® Fusion 6C	14,16	23,24	10,11.3	16,18	11,13
1		8,12	14,16		14,15	18,20
		9,11	11,13	12,14	14,15.2	
		30,31.2	11,15	X,X	10,13	22,24
		7,10	16,23.2	7,9.3	10,12	15,17
<hr/>						
42XQL4	GlobalFiler™ Express	14,16	23,24	10,11.3	16,18	11,13
1		8,12	14,16		14,15	18,20
		9,11	11,13	12,14	14,15.2	
		30,31.2	11,15	X,X	10,13	22,24
			16,23.2	7,9.3	10,12	15,17

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

44MW7Z	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
4KAAKT	Identifiler® Direct					
	-	23,24	-	16,18	-	11,13
1		8,12	14,16	-	-	-
	9,11	11,13	-	12,14	14,15.2	-
	30,31.2	-	X,X	10,13	22,24	-
	-	-	7,9.3	10,12	15,17	
62AMPM	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
64KND8	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
6FXLJW	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
6NP6ZP	GlobalFiler™ Express					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
6PHXV9	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

72UKKZ	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
74Z68Z	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
77LRZM	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
7A4AXY	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
7M2EUD	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
7RLBRZ	Identifiler® 16					
	-	23,24	-	16,18	-	11,13
1		8,12	14,16		-	-
	9,11	11,13	-	12,14	14,15.2	-
	30,31.2	-	X,X	10,13	22,24	-
		-	7,9.3	10,12	15,17	
7V4BA2	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

88UNKH	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10	16,23.2	7,9.3	10,12	15,17	
9A3GKB	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
9B7UY4	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
9KV7M	PowerPlex® ESX17, GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
9WM4Y2	Identifiler® Plus, PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
9YHPTT	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
9ZAQRN	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

ABM6EN	PowerPlex®					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10		7,9.3	10,12	15,17	
AP43FH	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
AT64JL	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
BAQA6K	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
BEJB7Y	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
BPGCLN	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
BR4QAX	Identifiler® Plus, PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

BV8NKQ	GlobalFiler™ Express					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
C2R4NN	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
CK4QCG	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
D4D8WL	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
DRJQ8K	PowerPlex® Fusion 5C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10		7,9.3	10,12	15,17	
EBPN4L	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
ERVTPC	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10	16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

EWT44R	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
F2EJQV	Identifiler® Plus					
		23,24		16,18		11,13
	8,12		14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
		7,9.3	10,12	15,17		
F3U3DD	PowerPlex® ESX17, GlobalFiler™ Express					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
	16,23.2	7,9.3	10,12	15,17		
F9HRTG	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
	16,23.2	7,9.3	10,12	15,17		
FK8M8W	Identifiler® Plus					
		23,24		16,18		11,13
	8,12		14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
		7,9.3	10,12	15,17		
FUGWWA	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
	16,23.2	7,9.3	10,12	15,17		
G2BGEV	Identifiler® Plus					
		23,24		16,18		11,13
	8,12		14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
		7,9.3	10,12	15,17		

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

GNQ4XF	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
	16,23.2	7,9.3	10,12	15,17		
GUEJTE	GlobalFiler™ Express					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
	16,23.2	7,9.3	10,12	15,17		
GVK73C	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
HD4G9C	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
	16,23.2	7,9.3	10,12	15,17		
HLFDDH	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
	16,23.2	7,9.3	10,12	15,17		
HQPUKL	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
J4RPE8	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
	8,12		14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10	16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

J9MCAG	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
JBEBNE	PowerPlex® Fusion					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10		7,9.3	10,12	15,17	
JLCBZJ	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
KC2C6M	Identifiler® 16					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
KKWD4D	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
KLRTQ	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
KRXQ4F	PowerPlex® ESI Fast 16					
	14,16	23,24	10,11.3	16,18		
1			14,16		14,15	18,20
		11,13		12,14	14,15.2	
	30,31.2	11,15	X,X		22,24	
			7,9.3		15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

KVTEKM	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
L8NV94	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
LCFZ28	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
LV9ZT4	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
MVQC73	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
NA3AN9	PowerPlex® 21					
	14,16	23,24		16,18		11,13
1	17,17	8,12	14,16			18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	9,9
	7,10		7,9.3	10,12	15,17	
NG4JXM	GlobalFiler™ Express					
	14,16	23,24	10,11.3	16,18	-	11,13
1	-	8,12	14,16	-	14,15	18,20
	9,11	11,13	-	12,14	14,15.2	-
	30,31.2	11,15	X,X	10,13	22,24	-
	-	16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

PRG3UN	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
QDDY6N	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
QPA3AG	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
QRB9L3	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
QVZFB6	GlobalFiler™ Express					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
R3REZG	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
RBJUMZ	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

RGCWTL	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
RL36DE	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
T3MCP4	Identifiler® Direct					
	-	23,24	-	16,18	-	11,13
1		8,12	14,16	-	-	-
	9,11	11,13	-	12,14	14,15.2	-
	30,31.2	-	X,X	10,13	22,24	-
	-	-	7,9.3	10,12	15,17	
T6BQED	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
TD6YVX	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10	16,23.2	7,9.3	10,12	15,17	
TJW22J	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
TXEURB	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

U2VDC6	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
UBW242	Identifiler® Direct					
	-	23,24	-	16,18	-	11,13
1		8,12	14,16	-	-	-
	9,11	11,13	-	12,14	14,15.2	-
	30,31.2	-	X,X	10,13	22,24	-
	-	-	7,9.3	10,12	15,17	
UD2TVF	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
UN6PEK	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
UWXYNF	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
UX78R9	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
UZCRE9	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

V8P6TX	PowerPlex® Fusion 6C Direct					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
VPWZQY	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
VU6KDB	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
W9GJW2	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
WB9GBZ	Identifiler® Direct					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
WGYUB3	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
WL8FWE	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

WLRVAV	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
WUK4W8	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
X82JBR	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
XD7FYX	Identifiler® Identifiler Direct					
	-	23,24	-	16,18	-	11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2	-	X,X	10,13	22,24	-
	-	-	7,9.3	10,12	15,17	
XU2KNU	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
XX3NG3	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
YELYJV	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 1 - STR Results

YTZ8HD	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
YUUTB6	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
Z2NKTW	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
ZHY247	Identifiler® Plus					
		23,24		16,18		11,13
1		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
ZLXGCT	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
1		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

2TCKZ8	Identifiler®	16,18		15		12,13
2		10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7	8,11	17	
3AVZEM	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
3MG9FV	PowerPlex® Fusion 6C	16,18	11,14	15,15		12,13
2	12,17	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
3U6VBZ	GlobalFiler™	16,18	11,14	15		12,13
2	12,17	10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
3VXR9	NGM SElect	16,18	11,14	15,15		
2	12,17		14,15		13,17	16,19
		9,14		17,19	13.2,14	
	29,31		X,Y		23,24	
		19,29.2	7,7		17,17	
3X62RR	PowerPlex® Fusion 6C	16,18	11,14	15,15		12,13
2	12,17	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
42XQL4	GlobalFiler™ Express	16,18	11,14	15,15		12,13
2	12,17	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

44MW7Z	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
4KAAKT	Identifiler® Direct					
	-	16,18	-	15	-	12,13
2		10	14,15	-	-	-
	12,14	9,14	-	17,19	13.2,14	-
	29,31	-	X,Y	10,11	23,24	-
	-	-	7	8,11	17	
62AMPM	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
64KND8	Identifiler® Plus					
		16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
6FXLJW	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
6NP6ZP	GlobalFiler™ Express					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
6PHXV9	Identifiler® Plus					
		16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
Item	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

72UKKZ	PowerPlex® Fusion 6c					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
74Z68Z	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
77LRZM	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
7A4AXY	Identifiler® Plus					
		16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
7M2EUD	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
7RLBRZ	Identifiler® 16					
	-	16,18	-	15,15	-	12,13
2		10,10	14,15	-	-	-
	12,14	9,14	-	17,19	13.2,14	-
	29,31	-	X,Y	10,11	23,24	-
	-	-	7,7	8,11	17,17	
7V4BA2	Identifiler® Plus					
		16,18		15		12,13
2		10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7	8,11	17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

88UNKH	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15		12,13
2	10					
	12,14	9,14		17,19	13,17	16,19
	29,31	17	X,Y	10,11	23,24	11
	5	19,29.2	7	8,11	17	
9A3GKB	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2	10,10					
	12,14	9,14		17,19	13,17	16,19
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
9B7UY4	Identifiler® Plus					
		16,18		15,15		12,13
2	10,10					
	12,14	9,14		17,19	13,17	16,19
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
9KVF7M	PowerPlex® ESX17, GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2	10,10					
	12,14	9,14		17,19	13,17	16,19
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
9WM4Y2	Identifiler® Plus, PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
2	10,10					
	12,14	9,14		17,19	13,17	16,19
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
9YHPTT	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
2	10					
	12,14	9,14		17,19	13,17	16,19
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
9ZAQRN	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2	10,10					
	12,14	9,14		17,19	13,17	16,19
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

ABM6EN	PowerPlex®					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5		7,7	8,11	17,17	
AP43FH	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
AT64JL	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
BAQA6K	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
BEJB7Y	Identifiler® Plus					
		16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
BPGCLN	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
2		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
BR4QAX	Identifiler® Plus, PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

BV8NKQ	GlobalFiler™ Express					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
C2R4NN	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
2		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
CK4QCG	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
D4D8WL	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
2		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
DRJQ8K	PowerPlex® Fusion 5C					
	12,17	16,18	11,14	15		12,13
2		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	11
	5		7	8,11	17	
EBPN4L	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
2		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
ERVTPC	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15		12,13
2		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	11
	5	19,29.2	7	8,11	17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

EWT44R	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
	2	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
F2EJQV	Identifiler® Plus					
		16,18		15		12,13
	2	10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7	8,11	17		
F3U3DD	PowerPlex® ESX17, GlobalFiler™ Express					
	12,17	16,18	11,14	15,15		12,13
	2	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
	19,29.2	7,7	8,11	17,17		
F9HRTG	Identifiler® Plus					
		16,18		15,15		12,13
	2	10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7,7	8,11	17,17		
FK8M8W	Identifiler® Plus					
		16,18		15,15		12,13
	2	10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7,7	8,11	17,17		
FUGWWA	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	2	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
	19,29.2	7,7	8,11	17,17		
G2BGEV	Identifiler® Plus					
		16,18		15,15		12,13
	2	10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7,7	8,11	17,17		

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

GNQ4XF	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	2		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
			19,29.2	7,7	8,11	17,17
GUEJTE	GlobalFiler™ Express					
	12,17	16,18	11,14	15,15		12,13
	2		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
			19,29.2	7,7	8,11	17,17
GVK73C	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
	2		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
		5,5	19,29.2	7,7	8,11	17,17
HD4G9C	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	2		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
			19,29.2	7,7	8,11	17,17
HLFDDH	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
	2		10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17	X,Y	10,11	23,24
			19,29.2	7	8,11	17
HQPUKL	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
	2		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
		5,5	19,29.2	7,7	8,11	17,17
J4RPE8	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15		12,13
	2		10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17	X,Y	10,11	23,24
		5	19,29.2	7	8,11	17

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

J9MCAG	GlobalFiler™						
	12,17	16,18	11,14	15		12,13	
	2		10	14,15		13,17	
		12,14	9,14		17,19	13.2,14	
		29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17		
JBEBNE	PowerPlex® Fusion						
	12,17	16,18	11,14	15		12,13	
	2		10	14,15		13,17	
		12,14	9,14		17,19	13.2,14	
		29,31	17	X,Y	10,11	23,24	11
	5		7	8,11	17		
JLCBZJ	GlobalFiler™						
	12,17	16,18	11,14	15,15		12,13	
	2		10,10	14,15		13,17	
		12,14	9,14		17,19	13.2,14	
		29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17		
KC2C6M	Identifiler® 16						
		16,18		15,15		12,13	
	2		10,10	14,15			
		12,14	9,14		17,19	13.2,14	
		29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17		
KKWD4D	Identifiler® Plus						
		16,18		15,15		12,13	
	2		10,10	14,15			
		12,14	9,14		17,19	13.2,14	
		29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17		
KLRTQ	Identifiler® Plus						
		16,18		15,15		12,13	
	2		10,10	14,15			
		12,14	9,14		17,19	13.2,14	
		29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17		
KRXQ4F	PowerPlex® ESI Fast 16						
	12,17	16,18	11,14	15,15			
	2		14,15		13,17	16,19	
		9,14		17,19	13.2,14		
		29,31	17,17	X,Y	23,24		
			7,7	17,17			

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

KVTEKM	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
L8NV94	GlobalFiler™	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
LCFZ28	PowerPlex® Fusion 6C	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
LV9ZT4	GlobalFiler™	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
MVQC73	GlobalFiler™	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
NA3AN9	PowerPlex® 21	16,18		15,15		12,13
2		10,10	14,15			16,19
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	11,11
	5,5		7,7	8,11	17,17	
NG4JXM	GlobalFiler™ Express	16,18	11,14	15,15	-	12,13
2		10,10	14,15	-	13,17	16,19
	12,14	9,14	-	17,19	13.2,14	-
	29,31	17,17	X,Y	10,11	23,24	-
	-	19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

PRG3UN	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
QDDY6N	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
QPA3AG	GlobalFiler™	16,18	11,14	15,15		12,13
2	12,17	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
QRB9L3	GlobalFiler™	16,18	11,14	15,15		12,13
2	12,17	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
QVZFB6	GlobalFiler™ Express	16,18	11,14	15,15		12,13
2	12,17	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
R3REZG	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
RBJUMZ	PowerPlex® Fusion 6C	16,18	11,14	15,15		12,13
2	12,17	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

RGCWTL	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
RL36DE	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
T3MCP4	Identifiler® Direct	16,18	-	15	-	12,13
2		10	14,15	-	-	-
	12,14	9,14	-	17,19	13.2,14	-
	29,31	-	X,Y	10,11	23,24	-
	-	-	7	8,11	17	
T6BQED	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
TD6YVX	PowerPlex® Fusion 6C	16,18	11,14	15		12,13
2		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	11
	5	19,29.2	7	8,11	17	
TJW22J	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
TXEURB	GlobalFiler™	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
Item	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

U2VDC6	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
	2	10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
	19,29.2	7	8,11	17		
UBW242	Identifiler® Direct					
	-	16,18	-	15	-	12,13
	2	10	14,15	-	-	-
	12,14	9,14	-	17,19	13.2,14	-
	29,31	-	X,Y	10,11	23,24	-
	-	7	8,11	17		
UD2TVF	Identifiler® Plus					
		16,18		15,15		12,13
	2	10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7,7	8,11	17,17		
UN6PEK	Identifiler® Plus					
		16,18		15,15		12,13
	2	10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7,7	8,11	17,17		
UWXYNF	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
	2	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
UX78R9	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
	2	10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
	19,29.2	7	8,11	17		
UZCRE9	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
	2	10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
	19,29.2	7	8,11	17		

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

V8P6TX	PowerPlex® Fusion 6C Direct					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
VPWZQY	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
VU6KDB	Identifiler® Plus					
		16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
W9GJW2	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
2		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
WB9GBZ	Identifiler® Direct					
		16,18		15		12,13
2		10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7	8,11	17	
WGYUB3	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
2		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
WL8FWE	Identifiler® Plus					
		16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

WLRVAV	PowerPlex® Fusion 6C					
		12,17	16,18	11,14	15,15	12,13
	2		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
	5,5	19,29.2	7,7	8,11	17,17	
WUK4W8	Identifiler® Plus					
			16,18		15,15	12,13
	2		10,10	14,15		
		12,14	9,14		17,19	13.2,14
		29,31		X,Y	10,11	23,24
			7,7	8,11	17,17	
X82JBR	GlobalFiler™					
		12,17	16,18	11,14	15,15	12,13
	2		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
		19,29.2	7,7	8,11	17,17	
XD7FYX	Identifiler® Identifiler Direct					
		-	16,18	-	15	-
	2		10	14,15	-	-
		12,14	9,14		17,19	13.2,14
		29,31	-	X,Y	10,11	23,24
	-	-	7	8,11	17	
XU2KNU	PowerPlex® Fusion 6C					
		12,17	16,18	11,14	15,15	12,13
	2		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
	5,5	19,29.2	7,7	8,11	17,17	
XX3NG3	GlobalFiler™					
		12,17	16,18	11,14	15	12,13
	2		10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17	X,Y	10,11	23,24
		19,29.2	7	8,11	17	
YELYJV	PowerPlex® Fusion 6C					
		12,17	16,18	11,14	15,15	12,13
	2		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
	5,5	19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 2 - STR Results

YTZ8HD	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
YUUTB6	GlobalFiler™	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
Z2NKTW	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
ZHY247	Identifiler® Plus	16,18		15,15		12,13
2		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
ZLXGCT	PowerPlex® Fusion 6C	16,18	11,14	15,15		12,13
2		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

2TCKZ8	Identifiler®	16,18		15		12,13
3		10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7	8,11	17	
3AVZEM	Identifiler® Plus	16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
3MG9FV	PowerPlex® Fusion 6C	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
3U6VBZ	GlobalFiler™	16,18	11,14	15		12,13
3		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
3VXR9	NGM SElect	16,18	11,14	15,15		
3			14,15		13,17	16,19
		9,14		17,19	13.2,14	
	29,31	17,17	X,Y		23,24	
		19,29.2	7,7		17,17	
3X62RR	PowerPlex® Fusion 6C	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
42XQL4	GlobalFiler™ Express	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

4KAAKT	Identifiler® Plus					
	-	16,18	-	15	-	12,13
3	-	10	14,15	-	-	-
	12,14	9,14	-	17,19	13.2,14	-
	29,31	-	X,Y	10,11	23,24	-
	-	-	7	8,11	17	
62AMPM	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
64KND8	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
6FXLJW	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
6PHXV9	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
77LRZM	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
7A4AXY	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
Item	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

7M2EUD	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
		19,29.2	7,7	8,11	17,17	
7RLBRZ	Identifiler® 16					
	-	16,18	-	15,15	-	12,13
	3		10,10	14,15	-	-
		12,14	9,14	-	17,19	13.2,14
		29,31	-	X,Y	10,11	23,24
	-	-	7,7	8,11	17,17	
7V4BA2	Identifiler® Plus					
		16,18		15		12,13
	3		10	14,15		
		12,14	9,14		17,19	13.2,14
		29,31		X,Y	10,11	23,24
			7	8,11	17	
88UNKH	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15		12,13
	3		10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17	X,Y	10,11	23,24
	5	19,29.2	7	8,11	17	11
9A3GKB	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
		19,29.2	7,7	8,11	17,17	
9B7UY4	Identifiler® Plus					
		16,18		15,15		12,13
	3		10,10	14,15		
		12,14	9,14		17,19	13.2,14
		29,31		X,Y	10,11	23,24
			7,7	8,11	17,17	
9KVF7M	PowerPlex® ESX17, GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3		10,10	14,15		13,17
		12,14	9,14		17,19	13.2,14
		29,31	17,17	X,Y	10,11	23,24
		19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

9WM4Y2	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
9ZAQRN	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
ABM6EN	PowerPlex®					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5		7,7	8,11	17,17	
AP43FH	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
AT64JL	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
BAQA6K	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
BEJB7Y	Identifiler® Plus					
		16,18		15,15		12,13
	3	10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7,7	8,11	17,17		

TABLE 1

WebCode	Amplification Kits					
	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
Item	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

BPGCLN	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
3	10					
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
BR4QAX	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
3	10,10					
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
C2R4NN	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
3	10					
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
CK4QCG	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3	10,10					
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
D4D8WL	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
3	10					
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
DRJQ8K	PowerPlex® Fusion 5C					
	12,17	16,18	11,14	15		12,13
3	10					
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	11
	5		7	8,11	17	
EBPN4L	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
3	10					
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

ERVTPC	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15		12,13
3	10		14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	11
	5	19,29.2	7	8,11	17	
F2EJQV	Identifiler® Plus					
		16,18		15		12,13
3	10		14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7	8,11	17	
F3U3DD	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3	10,10		14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
F9HRTG	Identifiler® Plus					
		16,18		15,15		12,13
3	10,10		14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
FK8M8W	Identifiler® Plus					
		16,18		15,15		12,13
3	10,10		14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
FUGWWA	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3	10,10		14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
G2BGEV	Identifiler® Plus					
		16,18		15,15		12,13
3	10,10		14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

GNQ4XF	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
	19,29.2	7,7	8,11	17,17		
GVK73C	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
HD4G9C	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
	19,29.2	7,7	8,11	17,17		
J4RPE8	PowerPlex® Fusion6C					
	12,17	16,18	11,14	15		12,13
	3	10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	11
	5	19,29.2	7	8,11	17	
JBEBNE	PowerPlex® Fusion					
	12,17	16,18	11,14	15		12,13
	3	10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	11
	5		7	8,11	17	
JLCBZJ	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
	19,29.2	7,7	8,11	17,17		
KC2C6M	Identifiler® 16					
		16,18		15,15		12,13
	3	10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7,7	8,11	17,17		

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

KKWD4D	Identifiler® Plus	16,18		15,15		12,13	
	3	10,10	14,15				
		12,14	9,14		17,19	13.2,14	
		29,31	X,Y	10,11		23,24	
			7,7	8,11		17,17	
KLTRTQ	PowerPlex® Fusion 6C	16,18	11,14	15,15		12,13	
	3	10,10	14,15		13,17	16,19	
		12,14	9,14		17,19	13.2,14	
		29,31	17,17	X,Y	10,11	23,24	11,11
		5,5	19,29.2	7,7	8,11		17,17
KRXQ4F	PowerPlex® ESI Fast 16	16,18	11,14	15,15			
	3		14,15		13,17	16,19	
		9,14		17,19		13.2,14	
		29,31	17,17	X,Y	10,11	23,24	
			7,7			17,17	
KVTEKM	Identifiler® Plus	16,18		15,15		12,13	
	3	10,10	14,15				
		12,14	9,14		17,19	13.2,14	
		29,31	X,Y	10,11		23,24	
			7,7	8,11		17,17	
L8NV94	GlobalFiler™	16,18	11,14	15,15		12,13	
	3	10,10	14,15		13,17	16,19	
		12,14	9,14		17,19	13.2,14	
		29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11		17,17	
LCFZ28	PowerPlex® Fusion 6C	16,18	11,14	15,15		12,13	
	3	10,10	14,15		13,17	16,19	
		12,14	9,14		17,19	13.2,14	
		29,31	17,17	X,Y	10,11	23,24	11,11
		5,5	19,29.2	7,7	8,11		17,17
LV9ZT4	GlobalFiler™	16,18	11,14	15,15		12,13	
	3	10,10	14,15		13,17	16,19	
		12,14	9,14		17,19	13.2,14	
		29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11		17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

MVQC73	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
NA3AN9	PowerPlex® 21					
	12,17	16,18		15,15		12,13
3		10,10	14,15			16,19
	12,14	9,14		17,19	13.2,14	
	29,31			10,11	23,24	11,11
	5,5		7,7	8,11	17,17	
NG4JXM	GlobalFiler™					
	12,17	16,18	11,14	15,15	-	12,13
3		10,10	14,15	-	13,17	16,19
	12,14	9,14	-	17,19	13.2,14	-
	29,31	17,17	X,Y	10,11	23,24	-
	-	19,29.2	7,7	8,11	17,17	
PRG3UN	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
QDDY6N	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
QPA3AG	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
QRB9L3	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

QVZFB6	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
R3REZG	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
RBJUMZ	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
RGCWTL	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
RL36DE	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
T3MCP4	Identifiler® Plus					
	-	16,18	-	15	-	12,13
3		10	14,15	-	-	-
	12,14	9,14	-	17,19	13.2,14	-
	29,31	-	X,Y	10,11	23,24	-
	-	-	7	8,11	17	
T6BQED	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
Item	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

TD6YVX	PowerPlex® Fusion 6C						
		12,17	16,18	11,14	15	12,13	
	3	10		14,15	13,17	16,19	
		12,14	9,14		17,19	13.2,14	
		29,31	17	X,Y	10,11	23,24	11
	5	19,29.2	7	8,11	17		
TJW22J	Identifiler® Plus						
			16,18		15,15	12,13	
	3	10,10		14,15			
		12,14	9,14		17,19	13.2,14	
		29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17		
TXEURB	GlobalFiler™						
		12,17	16,18	11,14	15,15	12,13	
	3	10,10		14,15	13,17	16,19	
		12,14	9,14		17,19	13.2,14	
		29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17		
U2VDC6	GlobalFiler™						
		12,17	16,18	11,14	15	12,13	
	3	10		14,15	13,17	16,19	
		12,14	9,14		17,19	13.2,14	
		29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17		
UBW242	Identifiler® Plus						
		-	16,18	-	15	12,13	
	3	10		14,15	-	-	
		12,14	9,14	-	17,19	13.2,14	-
		29,31	-	X,Y	10,11	23,24	-
	-	-	7	8,11	17		
UD2TVF	PowerPlex® Fusion 6C						
		12,17	16,18	11,14	15,15	12,13	
	3	10,10		14,15	13,17	16,19	
		12,14	9,14		17,19	13.2,14	
		29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17		
UN6PEK	Identifiler® Plus						
			16,18		15,15	12,13	
	3	10,10		14,15			
		12,14	9,14		17,19	13.2,14	
		29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17		

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

UWXYNF	Identifiler® Plus, PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	
UX78R9	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
3		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
UZCRE9	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
3		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
VPWZQY	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
		19,29.2	7,7	8,11	17,17	
VU6KDB	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7,7	8,11	17,17	
W9GJW2	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
3		10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
		19,29.2	7	8,11	17	
WB9GBZ	Identifiler® Plus					
		16,18		15		12,13
3		10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
			7	8,11	17	

TABLE 1

WebCode	Amplification Kits					
	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
Item	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

WGYUB3	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
	3	10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
	19,29.2	7	8,11	17		
WL8FWE	Identifiler® Plus					
		16,18		15,15		12,13
	3	10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7,7	8,11	17,17		
WUK4W8	Identifiler® Plus					
		16,18		15,15		12,13
	3	10,10	14,15			
	12,14	9,14		17,19	13.2,14	
	29,31		X,Y	10,11	23,24	
		7,7	8,11	17,17		
X82JBR	GlobalFiler™					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	
	19,29.2	7,7	8,11	17,17		
XD7FYX	Identifiler® Identifiler Plus					
	-	16,18	-	15	-	12,13
	3	10	14,15	-	-	-
	12,14	9,14	-	17,19	13.2,14	-
	29,31	-	X,Y	10,11	23,24	-
	-	7	8,11	17		
XX3NG3	GlobalFiler™					
	12,17	16,18	11,14	15		12,13
	3	10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17	X,Y	10,11	23,24	
	19,29.2	7	8,11	17		
YELYJV	PowerPlex® Fusion 6C					
	12,17	16,18	11,14	15,15		12,13
	3	10,10	14,15		13,17	16,19
	12,14	9,14		17,19	13.2,14	
	29,31	17,17	X,Y	10,11	23,24	11,11
	5,5	19,29.2	7,7	8,11	17,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 3 - STR Results

YTZ8HD	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
		12,14	9,14	17,19	13.2,14	
		29,31	X,Y	10,11	23,24	
			7,7	8,11	17,17	
YUUTB6	GlobalFiler™					
		16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
		12,14	9,14	17,19	13.2,14	
		29,31	17,17	X,Y	10,11	23,24
		19,29.2	7,7	8,11	17,17	
Z2NKTW	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
		12,14	9,14	17,19	13.2,14	
		29,31	X,Y	10,11	23,24	
			7,7	8,11	17,17	
ZHY247	Identifiler® Plus					
		16,18		15,15		12,13
3		10,10	14,15			
		12,14	9,14	17,19	13.2,14	
		29,31	X,Y	10,11	23,24	
			7,7	8,11	17,17	
ZLXGCT	PowerPlex® Fusion 6C					
		16,18	11,14	15,15		12,13
3		10,10	14,15		13,17	16,19
		12,14	9,14	17,19	13.2,14	
		29,31	17,17	X,Y	10,11	23,24
		5,5	19,29.2	7,7	8,11	17,17

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

2TCKZ8	Identifiler®	23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X	10,13	22,24	
			7,9.3	10,12	15,17	
3AVZEM	Identifiler® Plus	23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
3MG9FV	PowerPlex® Fusion 6C	23,24	10,11.3	16,18		11,13
4	14,16	8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
3U6VBZ	GlobalFiler™	23,24	10,11.3	16,18		11,13
4	14,16	8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
3VXR9	NGM SElect	23,24	10,11.3	16,18		
4	14,16		14,16		14,15	18,20
		11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
3X62RR	PowerPlex® Fusion 6C	23,24	10,11.3	16,18		11,13
4	14,16	8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
42XQL4	GlobalFiler™ Express	23,24	10,11.3	16,18		11,13
4	14,16	8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

4KAAKT	Identifiler® Plus					
	-	23,24	-	16,18	-	11,13
4	-	8,12	14,16	-	-	-
	9,11	11,13	-	12,14	14,15.2	-
	30,31.2	-	X,X	10,13	22,24	-
	-	-	7,9.3	10,12	15,17	
62AMPM	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4	-	8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
64KND8	Identifiler® Plus					
	-	23,24		16,18		11,13
4	-	8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
6FXLJW	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4	-	8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
6PHXV9	Identifiler® Plus					
	-	23,24		16,18		11,13
4	-	8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
77LRZM	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4	-	8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
7A4AXY	Identifiler® Plus					
	-	23,24		16,18		11,13
4	-	8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

7M2EUD	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
7RLBRZ	Identifiler® 16					
	-	23,24	-	16,18	-	11,13
4		8,12	14,16	-	-	-
	9,11	11,13	-	12,14	14,15.2	-
	30,31.2	-	X,X	10,13	22,24	-
		-	7,9.3	10,12	15,17	
7V4BA2	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X	10,13	22,24	
			7,9.3	10,12	15,17	
88UNKH	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10	16,23.2	7,9.3	10,12	15,17	
9A3GKB	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
9B7UY4	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
9KVF7M	PowerPlex® ESX17, GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

9WM4Y2	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4	8,12					
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
9ZAQRN	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4	8,12					
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
ABM6EN	PowerPlex®					
	14,16	23,24	10,11.3	16,18		11,13
4	8,12					
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10		7,9.3	10,12	15,17	
AP43FH	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4	8,12					
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
AT64JL	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4	8,12					
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
BAQA6K	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4	8,12					
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
BEJB7Y	Identifiler® Plus					
		23,24		16,18		11,13
4	8,12					
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

BPGCLN	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
BR4QAX	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
C2R4NN	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
CK4QCG	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
D4D8WL	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
DRJQ8K	PowerPlex® Fusion 5C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10		7,9.3	10,12	15,17	
EBPN4L	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

ERVTPC	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10	16,23.2	7,9.3	10,12	15,17	
F2EJQV	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
F3U3DD	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
F9HRTG	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
FK8M8W	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
FUGWWA	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
G2BGEV	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

GNQ4XF	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
GVK73C	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
HD4G9C	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
J4RPE8	PowerPlex® Fusion6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10	16,23.2	7,9.3	10,12	15,17	
JBEBNE	PowerPlex® Fusion					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10		7,9.3	10,12	15,17	
JLCBZJ	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
KC2C6M	Identifiler® 16					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

KKWD4D	Identifiler® Plus		23,24		16,18		11,13	
		4	8,12	14,16				
			9,11	11,13		12,14	14,15.2	
			30,31.2		X,X	10,13	22,24	
					7,9.3	10,12	15,17	
KLRTQ	PowerPlex® Fusion 6C		23,24	10,11.3	16,18		11,13	
		4	8,12	14,16		14,15	18,20	
			9,11	11,13		12,14	14,15.2	
			30,31.2	11,15	X,X	10,13	22,24	9,9
			7,10	16,23.2	7,9.3	10,12	15,17	
KRXQ4F	PowerPlex® ESI Fast 16		23,24	10,11.3	16,18			
		4		14,16		14,15	18,20	
				11,13		12,14	14,15.2	
			30,31.2	11,15	X,X	10,13	22,24	
					7,9.3		15,17	
KVTEKM	Identifiler® Plus		23,24		16,18		11,13	
		4	8,12	14,16				
			9,11	11,13		12,14	14,15.2	
			30,31.2		X,X	10,13	22,24	
					7,9.3	10,12	15,17	
L8NV94	GlobalFiler™		23,24	10,11.3	16,18		11,13	
		4	8,12	14,16		14,15	18,20	
			9,11	11,13		12,14	14,15.2	
			30,31.2	11,15	X,X	10,13	22,24	
				16,23.2	7,9.3	10,12	15,17	
LCFZ28	PowerPlex® Fusion 6C		23,24	10,11.3	16,18		11,13	
		4	8,12	14,16		14,15	18,20	
			9,11	11,13		12,14	14,15.2	
			30,31.2	11,15	X,X	10,13	22,24	9,9
			7,10	16,23.2	7,9.3	10,12	15,17	
LV9ZT4	GlobalFiler™		23,24	10,11.3	16,18		11,13	
		4	8,12	14,16		14,15	18,20	
			9,11	11,13		12,14	14,15.2	
			30,31.2	11,15	X,X	10,13	22,24	
				16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

MVQC73	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
NA3AN9	PowerPlex® 21					
	14,16	23,24		16,18		11,13
4		8,12	14,16			18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2			10,13	22,24	9,9
	7,10		7,9.3	10,12	15,17	
NG4JXM	GlobalFiler™					
	14,16	23,24	10,11.3	16,18	-	11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
PRG3UN	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
QDDY6N	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
QPA3AG	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
QRB9L3	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

QVZFB6	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
R3REZG	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
RBJUMZ	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
RGCWTL	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
RL36DE	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
T3MCP4	Identifiler® Plus					
	-	23,24	-	16,18	-	11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2	-	X,X	10,13	22,24	-
	-	-	7,9.3	10,12	15,17	
T6BQED	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

TD6YVX	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	9
	7,10	16,23.2	7,9.3	10,12	15,17	
TJW22J	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
TXEURB	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
U2VDC6	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
UBW242	Identifiler® Plus					
	-	23,24	-	16,18	-	11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2	-	X,X	10,13	22,24	-
			7,9.3	10,12	15,17	
UD2TVF	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
UN6PEK	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

UWXYNF	Identifiler® Plus, PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	
UX78R9	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
UZCRE9	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
VPWZQY	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
VU6KDB	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
W9GJW2	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
WB9GBZ	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

WGYUB3	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
WL8FWE	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
WUK4W8	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
X82JBR	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
XD7FYX	Identifiler® Identifiler Plus					
	-	23,24	-	16,18	-	11,13
4		8,12	14,16	-	-	-
	9,11	11,13	-	12,14	14,15.2	-
	30,31.2	-	X,X	10,13	22,24	-
	-	-	7,9.3	10,12	15,17	
XX3NG3	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
YELYJV	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	15,17	

TABLE 1

WebCode	Amplification Kits					
Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	

## Item 4 - STR Results

YTZ8HD	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
YUUTB6	GlobalFiler™					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	
		16,23.2	7,9.3	10,12	15,17	
Z2NKTW	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
ZHY247	Identifiler® Plus					
		23,24		16,18		11,13
4		8,12	14,16			
	9,11	11,13		12,14	14,15.2	
	30,31.2		X,X	10,13	22,24	
			7,9.3	10,12	15,17	
ZLXGCT	PowerPlex® Fusion 6C					
	14,16	23,24	10,11.3	16,18		11,13
4		8,12	14,16		14,15	18,20
	9,11	11,13		12,14	14,15.2	
	30,31.2	11,15	X,X	10,13	22,24	9,9
	7,10	16,23.2	7,9.3	10,12	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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

## Item 1 - YSTR Results

42XQL4	GlobalFiler™									
1	[Redacted]									
44MW7Z	PowerPlex® Fusion 6C									
1	[Redacted]									
			No Reaction	No Reaction				No Reaction		
62AMPM	PowerPlex® Fusion 6C									
1	[Redacted]									
		No results	No results					No results		
72UKKZ	PowerPlex® Fusion 6C									
1	[Redacted]									
			No reaction	No reaction				No reaction		
74Z68Z	PowerPlex® Fusion 6C									
1	[Redacted]									
		no reaction	no reaction					no reaction		
77LRZM	GlobalFiler™									
1	[Redacted]									
9KVF7M	GlobalFiler™									
1	[Redacted]									
								N.D.		N.D.
9WM4Y2	PowerPlex® Fusion Fusion 6C									
1	[Redacted]									
			no reaction	no reaction				no reaction		
9YHPTT	GlobalFiler™									
1	[Redacted]									
								No results		No results
ABM6EN	PowerPlex® Y									
1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	ND	ND	ND	ND	ND			ND	ND	ND

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 1 - YSTR Results

AP43FH	PowerPlex® Fusion 6C									
1	NR									
			NR	NR						
AT64JL	GlobalFiler™									
1	Not detected									
										Not detected
BAQA6K	GlobalFiler™									
1	Not detected									
										Not detected
BEJB7Y	Yfiler®									
1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
								NR		NR
BR4QAX	PowerPlex® Fusion 6C									
1	NR									
			NR	NR						
CK4QCG	GlobalFiler™									
1	Not detected									
										Not detected
EBPN4L	GlobalFiler™									
1	No results									
										No results
ERVTPC	PowerPlex® Fusion 6C									
1										
EWTA4R	PowerPlex® Fusion 6C									
1	No Reaction									
			No Reaction	No Reaction						
F3U3DD	GlobalFiler™ Express									
1	Not detected									
										Not detected

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 1 - YSTR Results

FK8M8W	Yfiler®	NR	NR	NR	NR	NR	NR	NR	NR	NR
1		NR	NR	NR	NR	NR				
								NR		NR
FUGWWA	GlobalFiler™									
1										
GUEJTE	GlobalFiler™									
1										
GVK73C	PowerPlex® Fusion Fusion 6C									
1										
HD4G9C	GlobalFiler™							Not detected		
1										Not detected
HLFDDH	GlobalFiler™							no results		
1										no results
HQPUKL	PowerPlex® Fusion 6C							No Reaction		
1				No Reaction	No Reaction					
J4RPE8	PowerPlex® Fusion 6C									
1										
J9MCAG	GlobalFiler™							No Results		
1										No Results
JBEBNE	PowerPlex® Fusion							NR		
1										
JLCBZJ	GlobalFiler™									
1										

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 1 - YSTR Results

L8NV94	Yfiler®, GlobalFiler™									
1	[Redacted]									
LCFZ28	PowerPlex® Fusion 6C									
1	[Redacted]									
LV9ZT4	Yfiler®, GlobalFiler™									
1	[Redacted]									
MVQC73	Yfiler®, GlobalFiler™									
1	[Redacted]									
QRB9L3	Yfiler®, GlobalFiler™									
1	[Redacted]									
QVZFB6	N.D.									
1	[Redacted]									
	N.D.									
RBJUMZ	PowerPlex® Fusion 6C									
1	[Redacted]									
	No Result									
	No Result No Result									
TXEURB	GlobalFiler™									
1	[Redacted]									
UWXYNF	PowerPlex® Fusion									
1	[Redacted]									
	No Reaction									
	No Reaction No Reaction									
UZCRE9	GlobalFiler™									
1	[Redacted]									
V8P6TX	PowerPlex® Fusion 6C Direct									
1	[Redacted]									



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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 2 - YSTR Results

3MG9FV	PowerPlex® Y 23									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16		25		
		11	11	14	15			22	13	10
3U6VBZ	PowerPlex® Y 23, GlobalFiler™									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16		25		
		11	11	14	15			22	13	10
										2
3VXR9	PowerPlex® Y 23									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16		25		
		11	11	14	15			22	13	10
3X62RR	PowerPlex® Y 23									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16		25		
		11	11	14	15			22	13	10
42XQL4	GlobalFiler™ Express									
							10			
2										2
44MW7Z	PowerPlex® Fusion Fusion 6C									
							10			
2				14	15					
4KAAKT	Yfiler®									
	-	16	15,17	14	32	23	10	11	13	14
2	11	12	21	-	15	16	-	-	-	-
	-	-	-	-	-	-	-	22	-	10
										-
62AMPM	Yfiler®, PowerPlex® Fusion 6C									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
				14	15			22		10
64KND8	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
6FXLJW	Yfiler®									
							10			
2										2
6NP6ZP	Yfiler® Plus, GlobalFiler™ Express									
	36,37	16	15,17	14	32	23	10	11	13	14
2	11	12	21	32	15	16	11	25		38
		11		14	15		19	22		10
										2
6PHXV9	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 2 - YSTR Results

72UKKZ	PowerPlex® Fusion 6C									
2	10									
	14			15						
74Z68Z	PowerPlex® Fusion 6C									
2	10									
	14			15						
77LRZM	GlobalFiler™									
2	10									
	2									
7A4AXY	Yfiler®									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16		22		10	
7M2EUD	10									
2	2									
88UNKH	Yfiler®, PowerPlex® Fusion 6C									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	14	15		22		10	
9A3GKB	10									
2	2									
9B7UY4	Yfiler®									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16		22		10	
9KVF7M	GlobalFiler™									
2	10									
	2									
9WM4Y2	Yfiler®, PowerPlex® Fusion Fusion 6C									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	14	15		22		10	
9YHPTT	GlobalFiler™									
2	10									
	2									
9ZAQRN	GlobalFiler™									
2	10									
	2									

TABLE 2

WebCode	Amplification Kit										
	DYF387S1	DYS19	DYS385	DYS389_I	DYS389_II	DYS390	DYS391	DYS392	DYS393	DYS437	
	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518	
Item	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4	Y Indel

Item 2 - YSTR Results

ABM6EN	PowerPlex® Y										
		16	15,17	14	32	23	10	11	13	14	
2	11	12	21		15	16		25			
		11	11	14	15			inconclusive	13	10	
AP43FH	Yfiler®, PowerPlex® Fusion 6C										
		16	15,17	14	32	23	10	11	13	14	
2	11	12	21		15	16					
				14	15			22		10	
AT64JL	GlobalFiler™										
							10				
2											2
BAQA6K	GlobalFiler™										
							10				
2											2
BEJB7Y	Yfiler®										
		16	15,17	14	32	23	10	11	13	14	
2	11	12	21		15	16					
								22		10	
BPGCLN	GlobalFiler™										
							10				
2											2
BR4QAX	Yfiler®, PowerPlex® Fusion 6C										
		16	15,17	14	32	23	10	11	13	14	
2	11	12	21		15	16					
				14	15			22		10	
BV8NKQ	Yfiler® Plus, GlobalFiler™ Express										
	36,37	16	15,17	14	32	23	10	11	13	14	
2	11	12	21	32	15	16	11	25		38	
		11		14	15		19	22		10	2
C2R4NN	Yfiler®, GlobalFiler™										
		16	15,17	14	32	23	10	11	13	14	
2	11	12	21		15	16					
								22		10	2
CK4QCG	GlobalFiler™										
							10				
2											2
D4D8WL	PowerPlex® Y 23, GlobalFiler™										
		16	15,17	14	32	23	10	11	13	14	
2	11	12	21		15	16		25			
		11	11	14	15			22	13	10	2
DRJQ8K	PowerPlex® Fusion 5C										
							10				
2											

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 2 - YSTR Results

EBPN4L	GlobalFiler™									
2	10									
ERVTPC	Yfiler®, PowerPlex® Fusion 6C									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
			14	15			22		10	
EWTA4R	PowerPlex® Fusion 6C									
2	10									
			14	15						
F2EJQV	Yfiler®									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
							22		10	
F3U3DD	GlobalFiler™ Express									
2	10									
										2
F9HRTG	PowerPlex® Y 23									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16		25			
	11	11	14	15			22	13	10	
FK8M8W	Yfiler®									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
							22		10	
FUGWWA	GlobalFiler™									
2	10									
										2
G2BGEV	Yfiler®									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
							22		10	
GNQ4XF										
2	10									
										2
GUEJTE	Yfiler® Plus, GlobalFiler™ Express									
2	36,37	16	15,17	14	32	23	10	11	13	14
	11	12	21	32	15	16	11	25		38
		11		14	15		19	22		10
										2
GVK73C	Yfiler®, PowerPlex® Fusion 6C									
2	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
			14	15			22		10	

TABLE 2

WebCode	Amplification Kit										
	DYF387S1	DYS19	DYS385	DYS389_I	DYS389_II	DYS390	DYS391	DYS392	DYS393	DYS437	
	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518	
Item	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4	Y Indel

Item 2 - YSTR Results

HD4G9C	GlobalFiler™													
2	[Redacted]										10			
											2			
HLFDDH	GlobalFiler™													
2	[Redacted]										10			
											2			
HQPUKL	PowerPlex® Fusion 6C													
2	[Redacted]										10			
											14	15		
J4RPE8	PowerPlex® Fusion 6C													
2	[Redacted]										10			
											14	15		
J9MCAG	GlobalFiler™													
2	[Redacted]										10			
											2			
JBEBNE	Yfiler®, PowerPlex® Fusion													
2	11	16	15,17	14	32	23	10	11	13	14				
	12	21		15	16			22		10				
JLCBZJ	GlobalFiler™													
2	[Redacted]										10			
											2			
KKWD4D	PowerPlex® Y 23													
2	11	16	15,17	14	32	23	10	11	13	14				
	12	21		15	16			25						
	11	11	14	15				22	13	10				
KLRTQ	Yfiler®													
2	11	16	15,17	14	32	23	10	11	13	14				
	12	21		15	16			22		10				
KRXQ4F	PowerPlex® Y 23 system													
2	11	16	15,17	14	32	23	10	11	13	14				
	12	21		15	16			25						
	11	11	14	15				22	13	10				
L8NV94	Yfiler®, GlobalFiler™													
2	11	16	15,17	14	32	23	10	11	13	14				
	12	21		15	16			22		10	2			
LCFZ28	Yfiler®, PowerPlex® Fusion 6C													
2	11	16	15,17	14	32	23	10	11	13	14				
	12	21		15	16			22		10				
											14	15	22	10

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 2 - YSTR Results

LV9ZT4	Yfiler®, GlobalFiler™									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
										2
MVQC73	Yfiler®, GlobalFiler™									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
										2
NG4JXM	GlobalFiler™									
	-	-	-	-	-	-	10	-	-	-
2	-	-	-	-	-	-	-	-	-	-
										2
PRG3UN	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
QDDY6N	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
QRB9L3	Yfiler®, GlobalFiler™									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
										2
QVZFB6										
							10			
2										
										2
R3REZG	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
RBJUMZ	Yfiler®, PowerPlex® Fusion 6C									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
				14	15			22		10
RGCWTL	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
T3MCP4	Yfiler®									
	-	16	15,17	14	32	23	10	11	13	14
2	11	12	21	-	15	16	-	-	-	-
				-	-	-	-	22	-	10
										-
TD6YX	PowerPlex® Fusion 6C									
							10			
2										
				14	15					

TABLE 2

WebCode	Amplification Kit										
	DYF387S1	DYS19	DYS385	DYS389_I	DYS389_II	DYS390	DYS391	DYS392	DYS393	DYS437	
	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518	
Item	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4	Y Indel

Item 2 - YSTR Results

TJW22J	Yfiler®	16	15,17	14	32	23	10	11	13	14	
2		11	12	21	15	16					
								22		10	
TXEURB	GlobalFiler™						10				
2											2
U2VDC6	Yfiler®	16	15,17	14	32	23	10	11	13	14	
2		11	12	21	15	16					
								22		10	2
UBW242	Yfiler®	-	16	15,17	14	32	23	10	11	13	14
2		11	12	21	-	15	16	-	-	-	-
		-	-	-	-	-	-	-	22	-	10
UD2TVF	Yfiler®	16	15,17	14	32	23	10	11	13	14	
2		11	12	21	15	16					
								22		10	
UN6PEK	Yfiler®	16	15,17	14	32	23	10	11	13	14	
2		11	12	21	15	16					
								22		10	
UWXYNF	Yfiler®, PowerPlex® Fusion	16	15,17	14	32	23	10	11	13	14	
2		11	12	21	15	16					
				14	15			22		10	
UX78R9	GlobalFiler™						10				
2											2
UZCRE9	GlobalFiler™						10				
2											2
V8P6TX	PowerPlex® Fusion 6C Direct						10				
2											
				14	15						
VPWZQY	GlobalFiler™						10				
2											2
W9GJW2	GlobalFiler™						10				
2											2

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 2 - YSTR Results

WB9GBZ	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
WGYUB3	PowerPlex® Y 23, GlobalFiler™									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16		25		
		11	11	14	15			22	13	10
										2
WL8FWE	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
WLRVAV	PowerPlex® Fusion 6C									
							10			
2										
				14	15					
WUK4W8	Yfiler® plus									
	36,37	16	15,17	14	32	23	10	11	13	14
2	11	12	21	32	15	16	11	25		38
		11		14	15		19	22		10
X82JBR	GlobalFiler™									
							10			
2										
										2
XD7FYX	Yfiler®									
	-	16	15,17	14	32	23	10	11	13	14
2	11	12	21	-	15	16	-	-	-	-
	-	-	-	-	-	-	-	22	-	10
										-
XU2KNU	PowerPlex® Fusion 6C									
							10			
2										
				14	15					
XX3NG3	GlobalFiler™									
							10			
2										
										2
YELYJV	PowerPlex® Y 23									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16		25		
		11	11	14	15			22	13	10
YTZ8HD	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
YUUTB6	GlobalFiler™									
							10			
2										
										2

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

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Z2NKTW	PowerPlex® Y 23									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16		25		
		11	11	14	15			22	13	10
ZHY247	Yfiler®									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
								22		10
ZLXGCT	Yfiler®, PowerPlex® Fusion 6C									
		16	15,17	14	32	23	10	11	13	14
2	11	12	21		15	16				
				14	15			22		10



TABLE 2

WebCode	Amplification Kit									
	DYF387S1	DYS19	DYS385	DYS389_I	DYS389_II	DYS390	DYS391	DYS392	DYS393	DYS437
Item	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 3 - YSTR Results

7M2EUD		36,37	16	15,17	14	32	23	10	11	13	14
3		11	12	21	32	15	16	11	25		38
			11		14	15		19	22		10
88UNKH	Yfiler®, PowerPlex® Fusion 6C		16	15,17	14	32	23	10	11	13	14
3		11	12	21		15	16				
					14	15			22		10
9A3GKB								10			
3											2
9B7UY4	Yfiler®		16	15,17	14	32	23	10	11	13	14
3		11	12	21		15	16				
									22		10
9KVF7M	GlobalFiler™							10			
3											2
9WM4Y2	Yfiler®, PowerPlex® Fusion Fusion 6C		16	15,17	14	32	23	10	11	13	14
3		11	12	21		15	16				
					14	15			22		10
9ZAQRN	GlobalFiler™							10			
3											2
ABM6EN	PowerPlex® Y		16	inconclusive	14	32	23	10	11	13	14
3		11	12	21		15	16		25		
			11	11	14	15			22	13	10
AP43FH	Yfiler®, PowerPlex® Fusion 6C		16	15,17	14	32	23	10	11	13	14
3		11	12	21		15	16				
					14	15			22		10
AT64JL	GlobalFiler™							10			
3											2
BAQA6K	GlobalFiler™							10			
3											2
BEJB7Y	Yfiler®		16	15,17	14	32	23	10	11	13	14
3		11	12	21		15	16				
									22		10

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 3 - YSTR Results

BPGCLN	GlobalFiler™									
3	10									
	2									
BR4QAX	Yfiler®, PowerPlex® Fusion 6C									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
			14	15			22		10	
C2R4NN	Yfiler®, GlobalFiler™									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
							22		10	2
CK4QCG	GlobalFiler™									
3	10									
	2									
D4D8WL	PowerPlex® Y 23, GlobalFiler™									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16		25			
	11	11	14	15			22	13	10	2
DRJQ8K	PowerPlex® Fusion 5C									
3	10									
	2									
EBPN4L	GlobalFiler™									
3	10									
	2									
ERVTPC	Yfiler®, PowerPlex® Fusion 6C									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
			14	15			22		10	
F2EJQV	Yfiler®									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
							22		10	
F3U3DD	GlobalFiler™									
3	10									
	2									
F9HRTG	PowerPlex® Y 23									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16		25			
	11	11	14	15			22	13	10	
FK8M8W	Yfiler®									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
							22		10	



TABLE 2

WebCode	Amplification Kit										
	DYF387S1	DYS19	DYS385	DYS389_I	DYS389_II	DYS390	DYS391	DYS392	DYS393	DYS437	
	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518	
Item	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4	Y Indel

Item 3 - YSTR Results

LCFZ28	Yfiler®, PowerPlex® Fusion 6C										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
				14	15			22		10	
LV9ZT4	Yfiler®, GlobalFiler™										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
								22		10	2
MVQC73	Yfiler®, GlobalFiler™										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
								22		10	2
NG4JXM	GlobalFiler™										
		-	-	-	-	-	-	10	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-
											2
PRG3UN	Yfiler®										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
								22		10	
QDDY6N	Yfiler®										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
								22		10	
QRB9L3	Yfiler®, GlobalFiler™										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
								22		10	2
QVZFB6											
							10				
3											
											2
R3REZG	Yfiler®, PowerPlex® Fusion 6C										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
				14	15			22		10	
RBJUMZ	Yfiler®, PowerPlex® Fusion 6C										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
				14	15			22		10	
RGCWTL	Yfiler®										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
								22		10	
T3MCP4	Yfiler®										
		-	16	15,17	14	32	23	10	11	13	14
3	11	12	21	-	15	16	-	-	-	-	-
				-	-	-	-	22	-	10	-

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 3 - YSTR Results

TD6YVX	PowerPlex® Fusion 6C									
3	10									
	14 15									
TJW22J	Yfiler®									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
	22								10	
TXEURB	GlobalFiler™									
3	10									
	2									
U2VDC6	Yfiler®									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
	22								10	2
UBW242	Yfiler®									
3	-	16	15,17	14	32	23	10	11	13	14
	11	12	21	-	15	16	-	-	-	-
	-	-	-	-	-	-	-	22	-	10 -
UD2TVF	Yfiler®, PowerPlex® Fusion 6C									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
	14 15								22	10
UN6PEK	Yfiler®									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
	22								10	
UWXYNF	Yfiler®, PowerPlex® Fusion									
3	16	15,17	14	32	23	10	11	13	14	
	11	12	21	15	16					
	14 15								22	10
UX78R9	GlobalFiler™									
3	10									
	2									
UZCRE9	GlobalFiler™									
3	10									
	2									
VPWZQY	GlobalFiler™									
3	10									
	2									
W9GJW2	GlobalFiler™									
3	10									
	2									

TABLE 2

WebCode	Amplification Kit										
	DYF387S1	DYS19	DYS385	DYS389_I	DYS389_II	DYS390	DYS391	DYS392	DYS393	DYS437	
	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518	
Item	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4	Y Indel

Item 3 - YSTR Results

WB9GBZ	Yfiler®	16	15,17	14	32	23	10	11	13	14	
	3	11	12	21	15	16					
								22		10	
WGYUB3	PowerPlex® Y 23, GlobalFiler™	16	15,17	14	32	23	10	11	13	14	
	3	11	12	21	15	16		25			
		11	11	14	15			22	13	10	2
WL8FWE	Yfiler®	16	15,17	14	32	23	10	11	13	14	
	3	11	12	21	15	16					
								22		10	
WUK4W8	Yfiler® plus	36,37	16	15,17	14	32	23	10	11	13	14
	3	11	12	21	32	15	16	11	25		38
		11		14	15		19	22		10	
X82JBR	GlobalFiler™						10				
	3										
											2
XD7FYX	Yfiler®	-	16	15,17	14	32	23	10	11	13	14
	3	11	12	21	-	15	16	-	-	-	-
		-	-	-	-	-	-	-	22	-	10
XX3NG3	GlobalFiler™						10				
	3										
											2
YELYJV	PowerPlex® Y 23	16	15,17	14	32	23	10	11	13	14	
	3	11	12	21	15	16		25			
		11	11	14	15			22	13	10	
YTZ8HD	Yfiler®	16	15,17	14	32	23	10	11	13	14	
	3	11	12	21	15	16					
								22		10	
YUUTB6	GlobalFiler™						10				
	3										
											2
Z2NKTW	PowerPlex® Y 23	16	15,17	14	32	23	10	11	13	14	
	3	11	12	21	15	16		25			
		11	11	14	15			22	13	10	
ZHY247	Yfiler®	16	15,17	14	32	23	10	11	13	14	
	3	11	12	21	15	16					
								22		10	

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	DYS505	DYS518	
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4	Y Indel

Item 3 - YSTR Results

ZLXGCT	Yfiler®, PowerPlex® Fusion 6C										
		16	15,17	14	32	23	10	11	13	14	
3	11	12	21		15	16					
				14	15			22		10	

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 4 - YSTR Results

42XQL4	GlobalFiler™ Express									
4	[Redacted]									
62AMPM	PowerPlex® Fusion 6C									
4	No results									
	No results					No results				
6PHXV9	Yfiler®									
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	NR	NR	NR	NR	NR	NR				
								NR		NR
77LRZM	GlobalFiler™									
4	[Redacted]									
9KVF7M	GlobalFiler™									
4	N.D.									
	N.D.									
9WM4Y2	PowerPlex® Fusion Fusion 6C									
4	no reaction									
	no reaction					no reaction				
ABM6EN	PowerPlex® Y									
4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	ND	ND	ND	ND	ND	ND				
	ND	ND	ND	ND	ND			ND	ND	ND
AP43FH	PowerPlex® Fusion 6C									
4	NR									
	NR					NR				
AT64JL	GlobalFiler™									
4	Not detected									
	Not detected									
BAQA6K	GlobalFiler™									
4	Not detected									
	Not detected									
BEJB7Y	Yfiler®									
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	NR	NR	NR	NR	NR	NR				
								NR		NR

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 4 - YSTR Results

BR4QAX	PowerPlex® Fusion 6C									
4	NR									
			NR	NR						
CK4QCG										
4	Not detected									
										Not detected
EBPN4L	GlobalFiler™									
4	No results									
										No results
ERVTPC	PowerPlex® Fusion 6C									
4										
F3U3DD	GlobalFiler™									
4	Not detected									
										Not detected
FK8M8W	Yfiler®									
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	NR	NR	NR		NR	NR		NR		NR
G2BGEV	Yfiler®									
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
								NR		NR
GVK73C	PowerPlex® Fusion Fusion 6C									
4										
HD4G9C	GlobalFiler™									
4	Not detected									
										Not detected
J4RPE8	PowerPlex® Fusion 6C									
4										
JBEENE	Yfiler®, PowerPlex® Fusion									
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	NR	NR	NR		NR	NR		NR		NR
								NR		NR

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 4 - YSTR Results

JLCBZJ	GlobalFiler™									
4	[Redacted]									
KLTRTQ	PowerPlex® Fusion Fusion 6C									
4	[Redacted] no reaction									
L8NV94	Yfiler®, GlobalFiler™									
4	[Redacted]									
LV9ZT4	Yfiler®, GlobalFiler™									
4	[Redacted]									
MVQC73	Yfiler®, GlobalFiler™									
4	[Redacted]									
PRG3UN	Yfiler®									
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
								NR		NR
QRB9L3	Yfiler®, GlobalFiler™									
4	[Redacted]									
QVZFB6	N.D.									
4	[Redacted] N.D.									
R3REZG	PowerPlex® Fusion 6C									
4	[Redacted] NR									
			NR	NR						
RBJUMZ	PowerPlex® Fusion 6C									
4	[Redacted] No Result									
			No Result	No Result						
RGCWTL	Yfiler®									
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
								NR		NR

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	DYS505	DYS518
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4 Y Indel

Item 4 - YSTR Results

TXEURB	GlobalFiler™									
4	[Redacted]									
UD2TVF	PowerPlex® Fusion 6C									
4	[Redacted]									
			No Reaction	No Reaction				No Reaction		
UN6PEK	Yfiler®									
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	NR	NR	NR	NR	NR	NR		NR		NR
UWXYNF	PowerPlex® Fusion									
4	[Redacted]									
			No Reaction	No Reaction				No Reaction		
UZCRE9	GlobalFiler™									
4	[Redacted]									
VPWZQY	GlobalFiler™									
4	[Redacted]									
								Not detected		
										Not detected
WL8FWE	Yfiler®									
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	NR	NR	NR	NR	NR	NR		NR		NR
X82JBR	GlobalFiler™									
4	[Redacted]									
XX3NG3	GlobalFiler™									
4	[Redacted]									
ZLXGCT	PowerPlex® Fusion 6C									
4	[Redacted]									

## 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 that did not already correspond to another location within the report.

# 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
2TCKZ8	No	Yes	Yes	No	9B7UY4	No	Yes	Yes	No
3AVZEM	No	Yes	Yes	No	9KVF7M	No	Yes	Yes	No
3MG9FV	No	Yes	Yes	No	9WM4Y2	No	Yes	Yes	No
3U6VBZ	No	Yes	Yes	No	9YHPTT	No Interpretations Reported, DNA Analyzed for Database purposes only.			
3VXR9	No	Yes	Yes	No	9ZAQRN	No	Yes	Yes	No
3X62RR	No	Yes	Yes	No	ABM6EN	No	Yes	Yes	No
42XQL4	No	Yes	Yes	No	AP43FH	No	Yes	Yes	No
44MW7Z	No Interpretations Reported, DNA Analyzed for Database purposes only.				AT64JL	No	Yes	Yes	No
4KAAKT	No	Yes	Yes	No	BAQA6K	No	Yes	Yes	No
62AMPM	No	Yes	Yes	No	BEJB7Y	No	Yes	Yes	No
64KND8	No	Yes	Yes	No	BPGCLN	No	Yes	Yes	No
6FXLJW	No Interp	No Interp	No Interp	No Interp	BR4QAX	No	Yes	Yes	No
6NP6ZP	No Interpretations Reported, DNA Analyzed for Database purposes only.				BV8NKQ	No Interpretations Reported, DNA Analyzed for Database purposes only.			
6PHXV9	No	Yes	Yes	No	C2R4NN	No	Yes	Yes	No
72UKKZ	No Interpretations Reported, DNA Analyzed for Database purposes only.				CK4QCG	No	Yes	Yes	No
74Z68Z	No Interpretations Reported, DNA Analyzed for Database purposes only.				D4D8WL	No	Yes	Yes	No
77LRZM	No Interpretations Reported, DNA Analyzed for Database purposes only.				DRJQ8K	No	Yes	Yes	No
7A4AXY	No	Yes	Yes	No	EBPN4L	No	Yes	Yes	No
7M2EUD	No	Yes	Yes	No	ERVTPC	No	Yes	Yes	No
7RLBRZ	No	Yes	Yes	No	EWTA4R	No Interpretations Reported, DNA Analyzed for Database purposes only.			
7V4BA2	No	Yes	Yes	No	F2EJQV	No	Yes	Yes	No
88UNKH	No	Yes	Yes	No	F3U3DD	No	Yes	Yes	No
9A3GKB	No	Yes	Yes	No	F9HRTG	No	Yes	Yes	No

TABLE 4

WebCode	<u>Victim (Item 1)</u>		<u>Suspect (Item 2)</u>		WebCode	<u>Victim (Item 1)</u>		<u>Suspect (Item 2)</u>	
	Item 3	Item 4	Item 3	Item 4		Item 3	Item 4	Item 3	Item 4
FK8M8W	No	Yes	Yes	No	PRG3UN	No	Yes	Yes	No
FUGWWA	No Interpretations Reported, DNA Analyzed for Database purposes only.				QDDY6N	No	Yes	Yes	No
G2BGEV	No	Yes	Yes	No	QPA3AG	No	Yes	Yes	No
GNQ4XF	No	Yes	Yes	No	QRB9L3	No Interpretations Reported, DNA Analyzed for Database purposes only.			
GUEJTE	No Interpretations Reported, DNA Analyzed for Database purposes only.				QVZFB6	No	Yes	Yes	No
GVK73C	No	Yes	Yes	No	R3REZG	No	Yes	Yes	No
HD4G9C	No	Yes	Yes	No	RBJUMZ	No	Yes	Yes	No
HLFDDH	No Interpretations Reported, DNA Analyzed for Database purposes only.				RGCWTL	No	Yes	Yes	No
HQPUKL	No Interpretations Reported, DNA Analyzed for Database purposes only.				RL36DE	No	Yes	Yes	No
J4RPE8	No	Yes	Yes	No	T3MCP4	No	Yes	Yes	No
J9MCAG	No Interpretations Reported, DNA Analyzed for Database purposes only.				T6BQED	No	Yes	Yes	No
JBEBNE	No	Yes	Yes	No	TD6YVX	No	Yes	Yes	No
JLCBZJ	No	Yes	Yes	No	TJW22J	No	Yes	Yes	No
KC2C6M	No	Yes	Yes	No	TXEURB	No	Yes	Yes	No
KKWD4D	No	Yes	Yes	No	U2VDC6	No	Yes	Yes	No
KLTRTQ	No	Yes	Yes	No	UBW242	No	Yes	Yes	No
KRXQ4F	No	Yes	Yes	No	UD2TVF	No	Yes	Yes	No
KVTEKM	No	Yes	Yes	No	UN6PEK	No	Yes	Yes	No
L8NV94	No Interpretations Reported, DNA Analyzed for Database purposes only.				UWXYNF	No	Yes	Yes	No
LCFZ28	No	Yes	Yes	No	UX78R9	No	Yes	Yes	No
LV9ZT4	No Interpretations Reported, DNA Analyzed for Database purposes only.				UZCRE9	No	Yes	Yes	No
MVQC73	No Interpretations Reported, DNA Analyzed for Database purposes only.				V8P6TX	No Interpretations Reported, DNA Analyzed for Database purposes only.			
NA3AN9	No	Yes	Yes	No	VPWZQY	No	Yes	Yes	No
NG4JXM	No	Yes	Yes	No	VU6KDB	No	Yes	Yes	No
					W9GJW2	No	Yes	Yes	No
					WB9GBZ	No	Yes	Yes	No

TABLE 4

WebCode	<u>Victim (Item 1)</u>		<u>Suspect (Item 2)</u>		WebCode	<u>Victim (Item 1)</u>		<u>Suspect (Item 2)</u>	
	Item 3	Item 4	Item 3	Item 4		Item 3	Item 4	Item 3	Item 4
WGYUB3	No	Yes	Yes	No					
WL8FWE	No	Yes	Yes	No					
WLRVAV	No Interpretations Reported, DNA Analyzed for Database purposes only.								
WUK4W8	No	Yes	Yes	No					
X82JBR	No Interpretations Reported, DNA Analyzed for Database purposes only.								
XD7FYX	No	Yes	Yes	No					
XU2KNU	No Interpretations Reported, DNA Analyzed for Database purposes only.								
XX3NG3	No	Yes	Yes	No					
YELYJV	No	Yes	Yes	No					
YTZ8HD	No	Yes	Yes	No					
YUUTB6	No	Yes	Yes	No					
Z2NKTW	No	Yes	Yes	No					
ZHY247	No	Yes	Yes	No					
ZLXGCT	No	Yes	Yes	No					

<b>DNA Interpretation</b>					
<b>Response Summary</b>	<b>Participants reporting DNA results: 110</b>				
<i>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 &amp; 4)?</i>					
		Victim (Item 1)		Suspect (Item 2)	
		<u>Item 3</u>	<u>Item 4</u>	<u>Item 3</u>	<u>Item 4</u>
Yes		<b>0</b>	<b>88</b>	<b>88</b>	<b>0</b>
No		<b>88</b>	<b>0</b>	<b>0</b>	<b>88</b>
Inc		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
No Interpretation		<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
No Response		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Participants analyzing DNA for database purposes only: 21

# Additional Comments

TABLE 5

WebCode	Additional Comments
3VXR9	No Y-STR carried out on Items 1 and 4 as X,X designation at Amelo indicates female hence no Y.
4KAAKT	1. Item 1 and Item 2 were extracted using the in-situ extraction method. 2. Item 3 and 4 were extracted using the Promega DNA IQ on Tecan Freedom EVO 150. 3. Item 3 and 4 were quantified using Quantifiler Human DNA Quantitation Kit carried out by 7500 Real Time PCR. 4. Item 1 and 2 were amplified using AmpFISTR Identifiler Direct Kit. 5. Item 3 and 4 were amplified using AmpFISTR Identifiler Plus Kit. 6. Item 2 and 3 were amplified using AmpFISTR Y-Filer Kit. 7. Electrophoresis were carried out using Genetic Analyzer 3130XL. 8. Reagent blank, positive and negative control were carried out along with the analysis and all gave the intended results.
6FXLJW	Examiner is competent in processing (laboratory work) samples, but not comparing samples.
6PHXV9	NR = No Reaction
ABM6EN	ND: not detected. inconclusive: alleles which did not reproducibly fall within a bin. Sample 3 DYS385 each peak is within 0.5 bp of the 15,17 alleles of the ladder. Sample 2 DYS635 the peak is within 0.5 bp of the 22 allele of the ladder
AP43FH	Items 2 and 3: amplified using Yfiler and Fusion 6C, location DYS391 is present in both kits. Typing results overlap and generated the same allele designation. Key: NR= No result
BEJB7Y	NR = No reaction
BR4QAX	NR=No Reaction
C2R4NN	Item 4 was not subjected to Y-filer testing due to no male DNA being detected in the quantification.
D4D8WL	Reported result for DYS391 applies to both Globalfiler and PowerPlex Y23.
FK8M8W	NR=No reaction
G2BGEV	NR = No reaction
J9MCAG	No additional peaks were detected.
JBEBNE	NR=No Results
L8NV94	Y indel was generated from Globalfiler and added to YFiler profile for items 2 and 3. DYS391 was consistent in Globalfiler and YFiler for items 2 and 3.
LV9ZT4	Y indel was generated from GlobalFiler and added to YFiler profile for item 2 and item 3. DYS391 was consistent in GlobalFiler and YFiler for item 2 and item 3.
MVQC73	Y indel was generated from the Globalfiler and added to Yfiler profile for items 2 and 3. DYS391 was consistent in Globalfiler and Yfiler for items 2 and 3.
PRG3UN	NR=No Reaction
QRB9L3	Y indel was generated from GlobalFiler and added to YFiler profile for item 2 and 3. DYS391 was consistent in Globalfiler and YFiler for item 2 and 3.
R3REZG	NR = no reaction
RGCWTL	NR = No Reaction
T3MCP4	1. Item 1 and 2 were extracted using the in-situ extraction method. 2. Item 3 and 4 were extracted using the Promega DNA IQ on Tecan Freedom EVO 150. 3. Item 3 and 4 were quantitated using Quantifiler Human DNA Quantitation Kit carried out by 7500 Real Time PCR. 5. Amplification was done using the AmpFISTR Identifiler Direct kit for Item 1 and 2, AmpFISTR Identifiler Plus kit for Item 3 and 4, and AmpFISTR Y-Filer kit on Item 2 to 3. 6. Electrophoresis was carried out by Genetic Analyzer 3130XL. 7. Reagent Blank, Positive Control and Negative Control were carried out along with the analysis and all gave the intended results.

TABLE 5

WebCode	Additional Comments
U2VDC6	No male DNA was indicated in the Item 1 and Item 4 samples therefore these samples were not amplified with Yfiler. The Y Indel result for Item 3 and Item 2 was obtained with the Globalfiler kit, but was recorded on the Y filer table.
UBW242	1. Item 1 and 2 were extracted using the in-situ extraction. 2. Item 3 and 4 were extracted using the PromegaDNA IQ on Tecan Freedom EVO 150. 3. Item 3 and 4 were quantified using Quantifiler Human DNA Quantification Kit carried out by 7500 Real Time PCR. 4. Amplification was done using the AmpFISTR Identifiler Direct Kit for Item 1 and 2, AmpFISTR Identifiler Plus Kit for Item 3 and 4, and AmpFISTR Y-Filer kit on Item 2 and 3. 5. Electrophoresis was carried out by Genetic Analyzer 3130XL. 6. Reagent Blank, Positive Control and Negative Control were carried out along with the analysis and all gave the intended results.
UN6PEK	NR = No Reaction
WB9GBZ	1) In-situ extraction method was used to extract DNA from Item 1 and Item 2. 2) Chelex extraction method was used to extract DNA from Item 3 and 4. 3) DNA quantitation was carried out using the Quantifiler Human DNA Quantification Kit with Applied Biosystems Real Time Polymerase Chain Reaction (PCR) 7500 System. 4) Amplification of STR (Short Tandem Repeat) Genetic Loci was carried out using the AmpFISTR Identifiler Plus and Direct PCR Amplification Kit. 5) Amplification of Y-STR (Short Tandem Repeat) Genetic Loci was carried out using the AmpFISTR Y-Filer PCR Amplification Kit. 6) Capillary electrophoresis was carried out using the Applied Biosystems 3130xl Genetic Analyzers with GeneMapper ID Software. 7) Reagent blank, positive control and negative control were carried out throughout the analysis.
WGYUB3	DYS391 is an overlapping locus found in both the GlobalFiler and PowerPlex Y23 amplification kits. The same allele resulted from both kits.
WL8FWE	NR = No Reaction
WUK4W8	The blood stain on item 3 refer to the suspect (item 2). The blood stain on item 4 refer to the victim (item 1)
XD7FYX	1. Item 1 and Item 2 were amplified using AmpFiSTR Identifiler Direct kit. 2. Item 3 and Item 4 were extracted using Chelex Extraction method, quantified using Quantifiler Human DNA Quantification kit and later were amplified using AmpFiSTR Identifiler Plus kit. 3. AmpFiSTR Y-Filer kit was used for Y-STR analysis. 4. Control DNA samples, positive control and negative control were also incorporated.

# Appendix: Data Sheet

Collaborative Testing Services ~ Forensic Testing Program

## **Test No. 17-5803: DNA-Blood**

DATA MUST BE RECEIVED BY June 19, 2017 TO BE INCLUDED IN THE REPORT

Participant Code:

WebCode:

### **Accreditation Release Statement**

CTS submits external proficiency test data directly to ASCLD/LAB, ANAB, and 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 on the last page must be completed and submitted.)
- This participant's data is **NOT** intended for submission to ASCLD/LAB, ANAB or A2LA.

#### Scenario:

Police are investigating the homicide of a female victim, whose throat was slashed while waiting at a bus stop. Security footage from a camera across from the bus stop shows a male suspect approach the victim from behind, grab her around the shoulders and slit her throat with his right hand. The suspect then fled the scene. Although the front of the victim's shirt was saturated in blood from the throat wound, a solitary red stain was found on the rear of her shirt. Details from the victim's family led investigators to perform a warranted search of the ex-boyfriend's (suspect) apartment, a shirt matching the one worn by the attacker in the security video was recovered, and a reddish stain was noted around the right pocket. Investigators are now submitting stains from the rear of the victim's shirt (Item 3) and from the suspect's shirt (Item 4) for additional testing. Screening has been performed on both samples with the following results: both Item 3 (the rear of the victim's shirt) and Item 4 (the suspect's shirt) are positive for blood. The screening lab is submitting these samples (Items 3 and 4) along with the known blood samples of the female victim and male suspect.

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

- Item 1: Known blood from the female victim
- Item 2: Known blood from the male suspect
- Item 3: Questioned blood from the victim's shirt (light purple material)
- Item 4: Questioned blood from the suspect's shirt (light blue material)

**Please return all pages of this data sheet.**

Page 1 of 8

**Part II: DNA ANALYSIS**

**DNA Analysis Instructions:**

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

- \* Report alleles in numerical order, separated by a comma.
- \* Follow your laboratory policy for reporting homozygotes.
- \* If your laboratory policy is to indicate minor or weaker alleles, please enclose them within brackets [ ].

**\*\*Please note Data Sheet Changes\*\***

The data sheet has been updated to include the GlobalFiler™ and PowerPlex® Fusion amplification kits. The sheet has also been updated to include the Next Generation Sequencing Kit ForenSeq™ and the associated STR and YSTR loci.

The YSTR section has also been expanded to include all of the Yfiler® Plus loci.

For the amplification kits that contain both STR and YSTR loci, please select the corresponding kit in the YSTR section, and enter the YSTR results in this section.

If a locus is not listed on the following pages of this data sheet, use the "Additional DNA Results" table below to report those results.

**Additional DNA Results:**

**Please use the section below to report results only for loci not available on the following pages.**

	<b>Item 1</b>	<b>Item 2</b>	<b>Item 3</b>	<b>Item 4</b>
_____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Please return all pages of this data sheet.**

**Part II (continued): DNA Results for Known Item 1**

**STR Amplification Kit(s) Used For Item 1:** Please check all the brands that apply for this item and record only additional kit specific information in the blank provided (i.e.16, Direct, etc.).

COfiler®/Profiler Plus®   
  Identifiler® \_\_\_\_\_   
  PowerPlex® \_\_\_\_\_  
 GlobalFiler™ \_\_\_\_\_   
  ForenSeq™   
 Other \_\_\_\_\_

<b>ITEM</b>	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
1	<input type="checkbox"/>					
<b>ITEM</b>	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
1	<input type="checkbox"/>					
<b>ITEM</b>	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
1	<input type="checkbox"/>					
<b>ITEM</b>	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
1	<input type="checkbox"/>					
<b>ITEM</b>	Penta E	SE33	TH01	TPOX	vWA	
1	<input type="checkbox"/>					

**YSTR Amplification Kit(s) Used For Item 1:** 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® \_\_\_\_\_   
  GlobalFiler™   
  PowerPlex® Fusion \_\_\_\_\_  
 PowerPlex® Y \_\_\_\_\_   
  ForenSeq™   
 Other \_\_\_\_\_

<b>ITEM</b>	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	DYS437	
1	<input type="checkbox"/>										
<b>ITEM</b>	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518	
1	<input type="checkbox"/>										
<b>ITEM</b>	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	Y GATA H4	Y Indel
1	<input type="checkbox"/>										

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

**STR Amplification Kit(s) Used For Item 2:** Please check all the brands that apply for this item and record only additional kit specific information in the blank provided (i.e.16, Direct, etc.).

COfiler®/Profiler Plus®   
  Identifiler® \_\_\_\_\_   
  PowerPlex® \_\_\_\_\_  
 GlobalFiler™ \_\_\_\_\_   
  ForenSeq™   
 Other \_\_\_\_\_

<b>ITEM</b>	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
<b>2</b>	<input type="checkbox"/>					
<b>ITEM</b>	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
<b>2</b>	<input type="checkbox"/>					
<b>ITEM</b>	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
<b>2</b>	<input type="checkbox"/>					
<b>ITEM</b>	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
<b>2</b>	<input type="checkbox"/>					
<b>ITEM</b>	Penta E	SE33	TH01	TPOX	vWA	
<b>2</b>	<input type="checkbox"/>					

**YSTR Amplification Kit(s) Used For Item 2:** 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® \_\_\_\_\_   
  GlobalFiler™   
  PowerPlex® Fusion \_\_\_\_\_  
 PowerPlex® Y \_\_\_\_\_   
  ForenSeq™   
 Other \_\_\_\_\_

<b>ITEM</b>	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	DYS437	
<b>2</b>	<input type="checkbox"/>										
<b>ITEM</b>	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518	
<b>2</b>	<input type="checkbox"/>										
<b>ITEM</b>	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	Y GATA H4	Y Indel
<b>2</b>	<input type="checkbox"/>										

**Part II (continued): DNA Results for Questioned Item 3**

**STR Amplification Kit(s) Used For Item 3:** Please check all the brands that apply for this item and record only additional kit specific information in the blank provided (i.e. 16, Direct, etc.).

COfiler®/Profiler Plus®   
  Identifiler® \_\_\_\_\_   
  PowerPlex® \_\_\_\_\_  
 GlobalFiler™ \_\_\_\_\_   
  ForenSeq™   
 Other \_\_\_\_\_

<b>ITEM</b>	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
<b>3</b>	<input type="checkbox"/>					
<b>ITEM</b>	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
<b>3</b>	<input type="checkbox"/>					
<b>ITEM</b>	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
<b>3</b>	<input type="checkbox"/>					
<b>ITEM</b>	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
<b>3</b>	<input type="checkbox"/>					
<b>ITEM</b>	Penta E	SE33	TH01	TPOX	vWA	
<b>3</b>	<input type="checkbox"/>					

**YSTR Amplification Kit(s) Used For Item 3:** 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® \_\_\_\_\_   
  GlobalFiler™   
  PowerPlex® Fusion \_\_\_\_\_  
 PowerPlex® Y \_\_\_\_\_   
  ForenSeq™   
 Other \_\_\_\_\_

<b>ITEM</b>	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	DYS437	
<b>3</b>	<input type="checkbox"/>										
<b>ITEM</b>	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518	
<b>3</b>	<input type="checkbox"/>										
<b>ITEM</b>	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	Y GATA H4	Y Indel
<b>3</b>	<input type="checkbox"/>										

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

**STR Amplification Kit(s) Used For Item 4:** Please check all the brands that apply for this item and record only additional kit specific information in the blank provided (i.e. 16, Direct, etc.).

COfiler®/Profiler Plus®   
  Identifiler® \_\_\_\_\_   
  PowerPlex® \_\_\_\_\_  
 GlobalFiler™ \_\_\_\_\_   
  ForenSeq™   
 Other \_\_\_\_\_

<b>ITEM</b>	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
4	<input type="checkbox"/>					
<b>ITEM</b>	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
4	<input type="checkbox"/>					
<b>ITEM</b>	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
4	<input type="checkbox"/>					
<b>ITEM</b>	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
4	<input type="checkbox"/>					
<b>ITEM</b>	Penta E	SE33	TH01	TPOX	vWA	
4	<input type="checkbox"/>					

**YSTR Amplification Kit(s) Used For Item 4:** 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® \_\_\_\_\_   
  GlobalFiler™   
  PowerPlex® Fusion \_\_\_\_\_  
 PowerPlex® Y \_\_\_\_\_   
  ForenSeq™   
 Other \_\_\_\_\_

<b>ITEM</b>	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393	DYS437	
4	<input type="checkbox"/>										
<b>ITEM</b>	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481	DYS505	DYS518	
4	<input type="checkbox"/>										
<b>ITEM</b>	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	Y GATA H4	Y Indel
4	<input type="checkbox"/>										

**Please return all pages of this data sheet.**

**Part III: 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)?

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

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**DNA interpretations not reported; samples analyzed for database purposes only.**

**Part IV: ADDITIONAL COMMENTS**

Comments regarding any part of this Forensic Biology Test.

*Written conclusions (including statistical information) for DNA analysis are not required. Any interpretations based on the results obtained should be indicated above.*

*Note: Laboratories submitting their results for ASCLD/LAB 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.*

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**Return Instructions:** Data must be received via online data entry, fax (please include a cover sheet), or mail by **June 19, 2017** to be included in the report. Emailed data sheets are not accepted.

QUESTION? TEL: +1-571-434-1925 (8 am - 4:30 pm EST) EMAIL: [forensics@cts-interlab.com](mailto:forensics@cts-interlab.com)  
[www.ctsforensics.com](http://www.ctsforensics.com)

ONLINE DATA ENTRY: [www.cts-portal.com](http://www.cts-portal.com)  
FAX: +1-571-434-1937  
MAIL: Collaborative Testing Services, Inc.  
P.O. Box 650820  
Sterling, VA 20165-0820 USA

**Please return all pages of this data sheet.**

Collaborative Testing Services ~ Forensic Testing Program

**RELEASE OF DATA TO ACCREDITATION BODIES**

The following Accreditation Releases will apply only to:

Participant Code: \_\_\_\_\_ WebCode: \_\_\_\_\_

for Test No. **17-5803: DNA-Blood**

This release page must be completed and received by **June 19, 2017** to have this participant's submitted data included in the reports forwarded to the respective Accreditation Bodies.

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**

**ASCLD/LAB** Certificate No. \_\_\_\_\_

**ANAB** Certificate No. \_\_\_\_\_

**A2LA** Certificate No. \_\_\_\_\_

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

Signature and Title \_\_\_\_\_

Laboratory Name \_\_\_\_\_

Location (City/State) \_\_\_\_\_

<b>Accreditation Release</b>	
<b><u>Return Instructions</u></b>	
<i>Please submit the completed Accreditation Release at the same time as your full data sheet. See Data Sheet Return Instructions on the previous page.</i>	<i>Questions? Contact us 8 am-4:30 pm EST Telephone: +1-571-434-1925 email: forensics@cts-interlab.com</i>

**Please return all pages of this data sheet.**