



DNA Database - Saliva Test No. 16-5840/5841/5842 Summary Report

This proficiency test was sent to 117 participants. Each participant received a sample pack consisting of three buccal saliva standards which they were requested to analyze using their existing protocols. Data were returned from 91 participants (78% 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 set was a collection of known buccal cells from three individuals (Items 1-3), provided on either Indicating FTA Micro Cards, Bode Buccal DNA Collectors, or Puritan CapSure swabs. Participants were requested to analyze these items using their existing protocols.

SAMPLE PREPARATION: All substrates were prepared from human buccal cheek cells suspended in sterile phosphate-buffered saline solution. The Indicating FTA Micro Cards were spotted with 120 μ l of the cell suspension, while both the Bode Buccal DNA Collectors and the Puritan CapSure swabs were spotted with 200 μ l of the cell suspension. Within each set of collectors, Items 1 and 3 were created using different male donors, and Item 2 was created using a female donor. Each different Item was prepared at separate times and were packaged once they were thoroughly dried. Completed sample sets were stored at -20°C until shipment on February 19th, 2016.

SAMPLE SET ASSEMBLY: For each sample set, all three Items (1-3) 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.

Amelogenin and STR Results

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

Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D7S820
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
1	11,11	23,24	11,14	15,16	11,11	10,12
	10,14	13,15	18,24	11,12	11,11	14,17
	14,16.2	30,31.2	11,15	X,Y	11,12	19,24
	10,11	10,13	*	6,6	11,11	14,18
2	15,17.3	17,24	11,11	15,16	11,12	11,11
	12,15	13,14	17.3,21	12,14	8,12	16,18
	14,15.2	29,30	14,15	X,X	11,11	23,25
	9,15	10,17	*	9,9.3	8,12	16,18
3	17.3,17.3	17,26	11,14	16,18	11,12	9,10
	15,16	14,15	18,21	12,13	8,9	12,18
	12,16	27,28	16,16	X,Y	10,11	21,25
	9,11	5,10	*	8,9.3	11,11	16,18

YSTR Results

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

Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	Y Indel	
1	13	15,17	12	28	24	10	11	12
	15	10	11	21	15	16	*	*
	*	*	*	22	*	12	*	
3	15	11,14	14	30	25	10	11	13
	14	11	11	20	17	16	*	*
	*	*	*	23	*	12	*	

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

Summary Comments

The 16-5840/5841/5842 DNA Database - Saliva test was designed to allow participants to assess their proficiency in the analysis of buccal samples by means of DNA profiling. Each sample pack consisted of three buccal saliva database standard samples collected from different individuals. Items 1 and 3 were created using oral epithelial cells collected from male donors, and Item 2 was created using oral epithelial cells collected from a female donor. (See Manufacturer's Information for preparation details)

DNA results were returned by a total of 91 participants. Two participants reported allelic results that differed from the consensus/predistribution testing results. Both of these participants reported inconsistent alleles at one or more loci.

This test was offered on one of three buccal collection substrates: the Indicating FTA Micro Cards, the Bode Buccal DNA Collectors, and the Puritan CapSure swabs. Out of the 91 participants that returned data, 39.6% reported results from the Indicating FTA Micro Cards, 52.7% reported results from the Bode Buccal DNA Collectors, and 7.7% reported results from the Puritan CapSure swabs. While the majority of laboratories reported results for only one of the three collection substrates, one laboratory reported results for all three.

The overall response for this new test was positive; the majority of the suggestions were regarding adding additional buccal collection materials and assigning the gender to each of the samples, which is commonly noted in the demographic information submitted to DNA databasing laboratories. CTS appreciates all of the comments and will evaluate the possibility of incorporating these suggestions into future test designs.

STR Results

TABLE 1

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

Item 1 - STR Results

2474X4 (5840)	1	<i>PowerPlex® 18D</i>					
			23,24		15,16	11	10,12
		10,14			11,12	11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
		10,11	10,13		6	11	14,18
29WGYR (5841)	1	<i>Identifiler® Plus</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
2HM26P (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
2ZM4MU (5840)	1	<i>PowerPlex® Fusion</i>					
		11,11	23,24	11,14	15,16	11,11	10,12
		10,14	13,15	18,24	11,12	11,11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		10,11	10,13		6,6	11,11	14,18
3AQLTQ (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
3PZDVV (5841)	1	<i>Identifiler® DIRECT</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
3UBML6 (5841)	1	<i>PowerPlex® Fusion</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		10,11	10,13		6	11	14,18

TABLE 1

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

Item 1 - STR Results

3Y6HLQ (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
3ZZZMR (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
47MABV (5840)	1	<i>PowerPlex® 18D</i>					
			23,24		15,16	11	10,12
		10,14			11,12	11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
		10,11	10,13		6	11	14,18
4LE8CQ (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
4MRGPX (5841)	1	<i>PowerPlex® Fusion</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		10,11	10,13		6	11	14,18
4NNX2U (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
4QA2AR (5840)	1	<i>PowerPlex® PowerPlex®21</i>					
		11	23,24		15,16	11,11	10,12
		10,14		18,24	11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
		10,11	10,13		6,6	11,11	14,18

TABLE 1

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

Item 1 - STR Results

67J3MU (5840)	1	<i>PowerPlex® Fusion</i>					
		11,11	23,24	11,14	15,16	11,11	10,12
		10,14	13,15	18,24	11,12	11,11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		10,11	10,13		6,6	11,11	14,18
6KZZTU (5842)	1	<i>PowerPlex® 18D</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
		10,11	10,13		6,6	11,11	14,18
6TTDL3 (5840)	1	<i>PowerPlex® Fusion</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		10,11	10,13		6	11	14,18
6UPLYT (5840)	1	<i>Global Filer</i>					
		11,11	23,24	11,14	15,16	11,11	10,12
		10,14	13,15	18,24	11,12	11,11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
			12.2,15	6,6	11,11	14,18	
6WUENK (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
77D8GT (5842)	1	<i>PowerPlex® 18D</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
		10,11	10,13		6,6	11,11	14,18
7JHBZ2 (5840)	1	<i>PowerPlex® Fusion</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		10,11	10,13		6	11	14,18

TABLE 1

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

Item 1 - STR Results

7ZUPKK (5841)	Identifiler® DIRECT	1	23,24		15,16	11,11	10,12
			10,14		11,12	11,11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
					6,6	11,11	14,18
8CJ2BN (5840)	PowerPlex® Fusion	1	23,24	11,14	15,16	11,11	10,12
			10,14	13,15	11,12	11,11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
			10,11	10,13	6,6	11,11	14,18
8MYXCL (5841)	Identifiler® Direct	1	23,24		15,16	11,11	10,12
			10,14		11,12	11,11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
					6,6	11,11	14,18
8QXA9L (5841)	Identifiler® Direct	1	23,24		15,16	11,11	10,12
			10,14		11,12	11,11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
					6,6	11,11	14,18
8RRZDZ (5841)	PowerPlex® fusion	1	23,24	11,14	15,16	11	10,12
			10,14	13,15	11,12	11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
			10,11	10,13	6	11	14,18
8VUZEX (5840)	PowerPlex® 18D	1	23,24		15,16	11	10,12
			10,14		11,12	11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
			10,11	10,13	6	11	14,18
AQ9VUT (5840)	PowerPlex® Fusion	1	23,24	11,14	15,16	11,11	10,12
			10,14	13,15	11,12	11,11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
			10,11	10,13	6,6	11,11	14,18

TABLE 1

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

Item 1 - STR Results

AWENPN (5840)	<i>Identifiler® Direct</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
B3KHJJ (5841)	<i>Identifiler® Direct</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
BBPPYJ (5841)	<i>Identifiler® Direct</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
BM89HF (5841)	<i>Identifiler® Direct</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
BN2YNV (5840)	<i>PowerPlex® 18D</i>						
	1		23,24		15,16	11	10,12
		10,14			11,12	11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
		10,11	10,13		6	11	14,18
C9GY9F (5841)	<i>Identifiler® Direct</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
CE6JCV (5841)	<i>PowerPlex® Fusion</i>						
	1	11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		10,11	10,13		6	11	14,18

TABLE 1

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

Item 1 - STR Results

CHA67N (5842)	GlobalFiler Express	1	11	23,24	11,14	15,16	11	10,12
			10,14	13,15	18,24	11,12	11	14,17
			14,16.2	30,31.2	11,15	X,Y	11,12	19,24
					12.2,15	6	11	14,18
CTP28K (5841)	PowerPlex® 18D	1		23,24		15,16	11,11	10,12
			10,14			11,12	11,11	14,17
			14,16.2	30,31.2		X,Y	11,12	19,24
			10,11	10,13		6,6	11,11	14,18
D2YQKJ (5840)	DNATyper 19	1		23,24		15,16	11	10,12
			10,14		18,24	11,12	11	14,17
			14,16.2	30,31.2		X,Y	11,12	19,24
				10,13		6	11	14,18
D87AMH (5840)	PowerPlex® PowerPlex® Fusion	1	11,11	23,24	11,14	15,16	11,11	10,12
			10,14	13,15	18,24	11,12	11,11	14,17
			14,16.2	30,31.2	11,15	X,Y	11,12	19,24
			10,11	10,13		6,6	11,11	14,18
DFFH9Q (5840)	NGM Select Express	1	11,11	23,24	11,14	15,16		
			10,14	13,15	18,24		11,11	14,17
			14,16.2	30,31.2	11,15	X,Y		19,24
					12.2,15	6,6		14,18
DMKHNL (5840)	PowerPlex® Fusion	1	11,11	23,24	11,14	15,16	11,11	10,12
			10,14	13,15	18,24	11,12	11,11	14,17
			14,16.2	30,31.2	11,15	X,Y	11,12	19,24
			10,11	10,13		6,6	11,11	14,18
DWPP4L (5842)	PowerPlex® 18D	1		23,24		15,16	11,11	10,12
			10,14			11,12	11,11	14,17
			14,16.2	30,31.2		X,Y	11,12	19,24
			10,11	10,13		6,6	11,11	14,18

TABLE 1

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

Item 1 - STR Results

G73RWP (5840)	1	<i>Identifiler®</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
G96Q8H (5840)	1	<i>PowerPlex® 16</i>					
		11,11	23,24	11,14	15,16		
		10,14	13,15	18,24		11,11	14,17
		14,16.2	30,31.2	11,15	X,Y		19,24
			6,6		14,18		
GTDVXC (5841)	1	<i>Identifiler® DIRECT</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
HKGFLD (5841)	1	<i>Identifiler® PLUS</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
HT9XZL (5841)	1	<i>PowerPlex® Fusion</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
	10,11	10,13		6	11	14,18	
J4KKND (5840)	1	<i>Identifiler® Plus, PowerPlex® 21</i>					
		11,11	23,24		15,16	11,11	10,12
		10,14		18,24	11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
	10,11	10,13		6,6	11,11	14,18	
JXWXT8 (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		

TABLE 1

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

Item 1 - STR Results

JYRGV9 (5841)	1	<i>Identifiler® DIRECT</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
KPZHG9 (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
KXRZVG (5840)	1	<i>PowerPlex® Fusion</i>					
		11,11	23,24	11,14	15,16	11,11	10,12
		10,14	13,15	18,24	11,12	11,11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
	10,11	10,13		6,6	11,11	14,18	
LDZDQK (5840)	1	<i>Identifiler®</i>					
			23,24		15,16	11	10,12
		10,14			11,12	11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6	11	14,18		
M64XF7 (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
MDJG XK (5841)	1	<i>PowerPlex® Fusion</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
	10,11	10,13		6	11	14,18	
MQ8JFC (5842)	1	<i>PowerPlex® 16, GlobalFiler Express</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
	10,11	10,13	12.2,15	6	11	14,18	

TABLE 1

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

Item 1 - STR Results

MYX2UK (5840)	1	<i>PowerPlex® Fusion</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		10,11	10,13		6	11	14,18
NAE97F (5840)	1	<i>PowerPlex® PP18D</i>					
			14,16.2		15,16	11	10,12
		10,14			11,12	11	14,17
		23,24	30,31.2		X,Y	11,12	19,24
		10,11	10,13		6	11	14,18
NGEMU2 (5841)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
				6,6	11,11	14,18	
NP779A (5840)	1	<i>Identifiler® Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
				6,6	11,11	14,18	
PT6JTE (5840)	1	<i>GlobalFiler</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
			12.2,15	6	11	14,18	
PW8H48 (5841)	1	<i>DNATyper 19</i>					
			23,24		15,16	11	10,12
		10,14		18,24	11,12	11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
		10,13		6	11	14,18	
PZHRUF (5840)	1	<i>PowerPlex® 16HS</i>					
					15,16	11,11	10,12
		10,14			11,12	11,11	14,17
			30,31.2		X,Y	11,12	19,24
		10,11	10,13		6,6	11,11	14,18

TABLE 1

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

Item 1 - STR Results

QGP9G9 (5840)	PowerPlex® 18D	1	23,24		15,16	11	10,12
			10,14		11,12	11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
			10,11	10,13	6	11	14,18
RRLCK3 (5841)	Identifiler® Direct	1	23,24		15,16	11,11	10,12
			10,14		11,12	11,11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
					6,6	11,11	14,18
TAXLY9 (5841)	PowerPlex® Fusion	1	11	23,24	11,14	15,16	11
			10,14	13,15	18,24	11,12	11
			14,16.2	30,31.2	11,15	X,Y	11,12
			10,11	10,13	6	11	14,18
TKY9Q6 (5840)	Identifiler® Direct	1	23,24		15,16	11,11	10,12
			10,14		11,12	11,11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
					6,6	11,11	14,18
TVFTB2 (5841)	Identifiler® DIRECT	1	23,24		15,16	11,11	10,12
			10,14		11,12	11,11	14,17
			14,16.2	30,31.2	X,Y	11,12	19,24
					6,6	11,11	14,18
U226MA (5840)	GlobalFiler	1	11	23,24	11,14	15,16	11
			10,14	13,15	18,24	11,12	11
			14,16.2	30,31.2	11,15	X,Y	11,12
					12.2,15	6	11
UAGP79 (5840)	PowerPlex® Fusion	1	11	23,24	11,14	15,16	11
			10,14	13,15	18,24	11,12	11
			14,16.2	30,31.2	11,15	X,Y	11,12
			10,11	10,13	6	11	14,18

TABLE 1

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

Item 1 - STR Results

UCY9Q3 (5841)	<i>Identifiler® DIRECT</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
ULNUW2 (5841)	<i>Identifiler® Direct</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
UM6QP2 (5841)	<i>Identifiler® Direct</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
UMJDY3 (5841)	<i>Identifiler® Direct</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
UVA3A (5841)	<i>Global Filer</i>						
	1	11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		-	-	12.2,15	6	11	14,18
VDABD2 (5841)	<i>Identifiler® Direct</i>						
	1		23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
					6,6	11,11	14,18
VFETF4 (5840)	<i>PowerPlex® Fusion</i>						
	1	11,11	23,24	11,14	15,16	11,11	10,12
		10,14	13,15	18,24	11,12	11,11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
		10,11	10,13		6,6	11,11	14,18

TABLE 1

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

Item 1 - STR Results

VMZTRA (5840)	Globalfiler	1	11	23,24	11,14	15,16	11	10,12
			10,14	13,15	18,24	11,12	11	14,17
			14,16.2	30,31.2	11,15	X,Y	11,12	19,24
					12.2,15	6	11	14,18
VT6PDV (5841)	Identifiler® Direct	1		23,24		15,16	11,11	10,12
			10,14			11,12	11,11	14,17
			14,16.2	30,31.2		X,Y	11,12	19,24
						6,6	11,11	14,18
VYPQT9 (5840)	PowerPlex® 18D	1		23,24		15,16	11	10,12
			10,14			11,12	11	14,17
			14,16.2	30,31.2		X,Y	11,12	19,24
			10,11	10,13		6	11	14,18
VZL9UA (5840)	PowerPlex® 18D	1		23,24		15,16	11	10,12
			10,14			11,12	11	14,17
			14,16.2	30,31.2		X,Y	11,12	19,24
			10,11	10,13		6	11	14,18
WXCFF2 (5841)	Identifiler® Direct	1		23,24		15,16	11,11	10,12
			10,14			11,12	11,11	14,17
			14,16.2	30,31.2		X,Y	11,12	19,24
						6,6	11,11	14,18
XDMGPW (5841)	Identifiler® DIRECT	1		23,24		15,16	11,11	10,12
			10,14			11,12	11,11	14,17
			14,16.2	30,31.2		X,Y	11,12	19,24
						6,6	11,11	14,18
Y3WHBW (5842)	DNATyper 19	1		23,24		15,16	11	10,12
			10,14		18,24	11,12	11	14,17
			14,16.2	30,31.2		X,Y	11,12	19,24
				10,13		6	11	14,18

TABLE 1

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

Item 1 - STR Results

Y4RZDX (5841)	1	<i>Identifiler® Plus</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
Y8CTPZ (5842)	1	<i>PowerPlex® Fusion</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
	10,11	10,13		6	11	14,18	
Y8R9G9 (5841)	1	<i>PowerPlex® Fusion</i>					
		11	23,24	11,14	15,16	11	10,12
		10,14	13,15	18,24	11,12	11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
	10,11	10,13		6	11	14,18	
YFN4GR (5841)	1	<i>Identifiler® DIRECT</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
YYW7FW (5841)	1	<i>Identifiler® Identifiler Direct</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		
ZXMGUY (5840)	1	<i>PowerPlex® Fusion</i>					
		11,11	23,24	11,14	15,16	11,11	10,12
		10,14	13,15	18,24	11,12	11,11	14,17
		14,16.2	30,31.2	11,15	X,Y	11,12	19,24
	10,11	10,13		6,6	11,11	14,18	
ZYVT8U (5841)	1	<i>Identifiler® DIRECT</i>					
			23,24		15,16	11,11	10,12
		10,14			11,12	11,11	14,17
		14,16.2	30,31.2		X,Y	11,12	19,24
			6,6	11,11	14,18		

TABLE 1

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

Item 2 - STR Results

2474X4 (5840)	2	PowerPlex® 18D					
			17,24		15,16	11,12	11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
29WGYR (5841)	2	Identifiler® Plus					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
2HM26P (5841)	2	Identifiler® Direct					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
2ZM4MU (5840)	2	PowerPlex® FUSION					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18
3AQLTQ (5841)	2	Identifiler® Direct					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
3PZDVV (5841)	2	Identifiler® DIRECT					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
3UBML6 (5841)	2	PowerPlex® Fusion					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

3Y6HLQ (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
3ZZZMR (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
47MABV (5840)	2	<i>PowerPlex® 18D</i>					
			17,24		15,16	11,12	11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
4LE8CQ (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
4MRGPX (5841)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
4NNX2U (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
4QA2AR (5840)	2	<i>PowerPlex® PowerPlex®21</i>					
		15,17.3	17,24		15,16	11,12	11,11
		12,15		17.3,21	12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

67J3MU (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18
6KZZTU (5842)	2	<i>PowerPlex® 18D</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18
6TTDL3 (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
6UPLYT (5840)	2	<i>Global Filer</i>					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
				17,26.2	9,9.3	8,12	16,18
6WUENK (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
77D8GT (5842)	2	<i>PowerPlex® 18D</i>					
					15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18
7JHBZ2 (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

7ZUPKK (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		
8CJ2BN (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
	9,15	10,17	9,9.3	8,12	16,18		
8MYXCL (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		
8QXA9L (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		
8RRZDZ (5841)	2	<i>PowerPlex® fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
	9,15	10,17	9,9.3	8,12	16,18		
8VUZEX (5840)	2	<i>PowerPlex® 18D</i>					
			17,24		15,16	11,12	11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
	9,15	10,17	9,9.3	8,12	16,18		
AQ9VUT (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
	9,15	10,17	9,9.3	8,12	16,18		

TABLE 1

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

Item 2 - STR Results

AWENPN (5840)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
B3KHJJ (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
BBPPYJ (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
BM89HF (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
BN2YNV (5840)	2	<i>PowerPlex® 18D</i>					
			17,24		15,16	11,12	11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
C9GY9F (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
CE6JCV (5841)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

CHA67N (5842)	2	GlobalFiler Express					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
				17,26.2	9,9.3	8,12	16,18
CTP28K (5841)	2	PowerPlex® 18D					
			17,14		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18
D2YQKJ (5840)	2	DNATyper 19					
			17,24		15,16	11,12	11
		12,15		17.3,21	12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
			10,17		9,9.3	8,12	16,18
D87AMH (5840)	2	PowerPlex® PowerPlex® Fusion					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18
DFFH9Q (5840)	2	NGM Select Express					
		15,17.3	17,24	11,11	15,16		
		12,15	13,14	17.3,21		8,12	16,18
		14,15.2	29,30	14,15	X,X		23,25
				17,26.2	9,9.3		16,18
DMKHNL (5840)	2	PowerPlex® Fusion					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18
DWPP4L (5842)	2	PowerPlex® 18D					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

G73RWP (5840)	2	<i>Identifiler®</i>					
			17,24		15,16	11,12	11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
			9,9.3	8,12	16,18		
G96Q8H (5840)	2	<i>PowerPlex® 16</i>					
		15,17.3	17,24	11,11	15,16		
		12,15	13,14	17.3,21		8,12	16,18
		14,15.2	29,30	14,15	X,X		23,25
			9,9.3		16,18		
GTDVXC (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		
HKGFLD (5841)	2	<i>Identifiler® PLUS</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		
HT9XZL (5841)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
	9,15	10,17		9,9.3	8,12	16,18	
J4KKND (5840)	2	<i>Identifiler® Plus, PowerPlex® 21</i>					
		15,17.3	17,24		15,16	11,12	11,11
		12,15		17.3,21	12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
	9,15	10,17		9,9.3	8,12	16,18	
JXWXT8 (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		

TABLE 1

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

Item 2 - STR Results

JYRGV9 (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
KPZHG9 (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
KXRZVG (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18
LDZDQK (5840)	2	<i>Identifiler®</i>					
			17,24		15,16	11,12	11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
					9,9.3	8,12	16,18
M64XF7 (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
MDJG XK (5841)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
MQ8JFC (5842)	2	<i>PowerPlex® 16, GlobalFiler Express</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
		9,15	10,17	17,26.2	9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

MYX2UK (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
NAE97F (5840)	2	<i>PowerPlex® PP18D</i>					
			14,15.2		15,16	11,12	11
		12,15			12,14	8,12	16,18
		17,24	29,30		X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
NGEMU2 (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
				9,9.3	8,12	16,18	
NP779A (5840)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
				9,9.3	8,12	16,18	
PT6JTE (5840)	2	<i>GlobalFiler</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
			17,26.2	9,9.3	8,12	16,18	
PW8H48 (5841)	2	<i>DNATyper 19</i>					
			17,24		15,16	11,12	11
		12,15		17.3,21	12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
		10,17		9,9.3	8,12	16,18	
PZHRUF (5840)	2	<i>PowerPlex® 16HS</i>					
					15,16	11,12	11,11
		12,15			12,14	8,12	16,18
			29,30		X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

QGP9G9 (5840)	2	<i>PowerPlex® 18D</i>					
			17,24		15,16	11,12	11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
RRLCK3 (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
TAXLY9 (5841)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
TKY9Q6 (5840)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
TVFTB2 (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
U226MA (5840)	2	<i>GlobalFiler</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
				17,26.2	9,9.3	8,12	16,18
UAGP79 (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

UCY9Q3 (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
ULNUW2 (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
UM6QP2 (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
UMJDY3 (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
UVWA3A (5841)	2	<i>Global Filer</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
		-	-	17,26.2	9,9.3	8,12	16,18
VDABD2 (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
VFETF4 (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
		9,15	10,17		9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

VMZTRA (5840)	2	<i>Globalfiler</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
				17,26.2	9,9.3	8,12	16,18
VT6PDV (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
VYPQT9 (5840)	2	<i>PowerPlex® 18D</i>					
			17,24		15,16	11,12	11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
VZL9UA (5840)	2	<i>PowerPlex® 18D</i>					
			17,24		15,16	11,12	11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
		9,15	10,17		9,9.3	8,12	16,18
WXCF2 (5841)	2	<i>Identifiler® Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
XDMGPW (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
					9,9.3	8,12	16,18
Y3WHBW (5842)	2	<i>DNATyper 19</i>					
			17,24		15,16	11,12	11
		12,15		17.3,21	12,14	8,12	16,18
		14,15.2	29,30		X	11	23,25
			10,17		9,9.3	8,12	16,18

TABLE 1

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

Item 2 - STR Results

Y4RZDX (5841)	2	<i>Identifiler® Plus</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		
Y8CTPZ (5842)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
	9,15	10,17		9,9.3	8,12	16,18	
Y8R9G9 (5841)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11	15,16	11,12	11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X	11	23,25
	9,15	10,17		9,9.3	8,12	16,18	
YFN4GR (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		
YYW7FW (5841)	2	<i>Identifiler® Identifiler Direct</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		
ZXMGUY (5840)	2	<i>PowerPlex® Fusion</i>					
		15,17.3	17,24	11,11	15,16	11,12	11,11
		12,15	13,14	17.3,21	12,14	8,12	16,18
		14,15.2	29,30	14,15	X,X	11,11	23,25
	9,15	10,17		9,9.3	8,12	16,18	
ZYVT8U (5841)	2	<i>Identifiler® DIRECT</i>					
			17,24		15,16	11,12	11,11
		12,15			12,14	8,12	16,18
		14,15.2	29,30		X,X	11,11	23,25
			9,9.3	8,12	16,18		

TABLE 1

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

Item 3 - STR Results

2474X4 (5840)	3	PowerPlex® 18D					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18
29WGYR (5841)	3	Identifiler® Plus					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
2HM26P (5841)	3	Identifiler® Direct					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
2ZM4MU (5840)	3	PowerPlex® Fusion					
		17.3,17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16,16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18
3AQLTQ (5841)	3	Identifiler® Direct					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
3PZDVV (5841)	3	Identifiler® DIRECT					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
3UBML6 (5841)	3	PowerPlex® Fusion					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18

TABLE 1

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

Item 3 - STR Results

3Y6HLQ (5841)	<i>Identifiler® Direct</i>						
	3		17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
3ZZZMR (5841)	<i>Identifiler® Direct</i>						
	3		17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
47MABV (5840)	<i>PowerPlex® 18D</i>						
	3		17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18
4LE8CQ (5841)	<i>Identifiler® Direct</i>						
	3		17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
4MRGPX (5841)	<i>PowerPlex® Fusion</i>						
	3	17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18
4NNX2U (5841)	<i>Identifiler® Direct</i>						
	3		17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
4QA2AR (5840)	<i>PowerPlex® PowerPlex®21</i>						
	3	17.3	17,26		16,18	11,12	9,10
		15,16		18,21	12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18

TABLE 1

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

Item 3 - STR Results

67J3MU (5840)	3	<i>PowerPlex® Fusion</i>					
		17.3,17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16,16	X,Y	10,11	21,25
		9,11	5,10	8,9.3	11,11	16,18	
6KZZTU (5842)	3	<i>PowerPlex® 18D</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		9,11	5,10	8,9.3	11,11	16,18	
6TTDL3 (5840)	3	<i>PowerPlex® Fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		9,11	5,10	8,9.3	11	16,18	
6UPLYT (5840)	3	<i>Global Filer</i>					
		17.3,17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16,16	X,Y	10,11	21,25
			12,25.2	8,9.3	11,11	16,18	
6WUENK (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
77D8GT (5842)	3	<i>PowerPlex® 18D</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		9,11	5,10	8,9.3	11,11	16,18	
7JHBZ2 (5840)	3	<i>PowerPlex® Fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		9,11	5,10	8,9.3	11	16,18	

TABLE 1

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

Item 3 - STR Results

7ZUPKK (5841)	3	<i>Identifiler® DIRECT</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
8CJ2BN (5840)	3	<i>PowerPlex® Fusion</i>					
		17.3,17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16,16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18
8MYXCL (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
8QXA9L (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
8RRZDZ (5841)	3	<i>PowerPlex® fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18
8VUZEX (5840)	3	<i>PowerPlex® 18D</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18
AQ9VUT (5840)	3	<i>PowerPlex® Fusion</i>					
		17.3,17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16,16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18

TABLE 1

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

Item 3 - STR Results

AWENPN (5840)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
B3KHJJ (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
BBPPYJ (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
BM89HF (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
BN2YNV (5840)	3	<i>PowerPlex® 18D</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18
C9GY9F (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
CE6JCV (5841)	3	<i>PowerPlex® Fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18

TABLE 1

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

Item 3 - STR Results

CHA67N (5842)	3	<i>GlobalFilerExpress</i>					
		17,3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
				12,25.2	8,9.3	11	16,18
CTP28K (5841)	3	<i>PowerPlex® 18D</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18
D2YQKJ (5840)	3	<i>DNATyper 19</i>					
			17,26		16,18	11,12	9,10
		15,16		18,21	12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			5,10		8,9.3	11	16,18
D87AMH (5840)	3	<i>PowerPlex® PowerPlex® Fusion</i>					
		17.3,17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16,16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18
DFFH9Q (5840)	3	<i>NGM Select Express</i>					
		17.3,17.3	17,26	11,14	16,18		
		15,16	14,15	18,21		8,9	12,18
		12,16	27,28	16,16	X,Y		21,25
				12,25.2	8,9.3		16,18
DMKHNL (5840)	3	<i>PowerPlex® Fusion</i>					
		17.3,17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16,16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18
DWPP4L (5842)	3	<i>PowerPlex® 18D</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18

TABLE 1

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

Item 3 - STR Results

G73RWP (5840)	3	<i>Identifiler®</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
G96Q8H (5840)	3	<i>PowerPlex® 16</i>					
		17.3,17.3	17,26	11,14	16,18		
		15,16	14,15	18,21		8,9	12,18
		12,16	27,28	16,16	X,Y		21,25
			8,9.3		16,18		
GTDVXC (5841)	3	<i>Identifiler® DIRECT</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
HKGFLD (5841)	3	<i>Identifiler® PLUS</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
HT9XZL (5841)	3	<i>PowerPlex® Fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
	9,11	5,10	8,9.3	11	16,18		
J4KKND (5840)	3	<i>Identifiler® Plus, PowerPlex® 21</i>					
		17.3,17.3	17,26		16,18	11,12	9,10
		15,16		18,21	12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
	9,11	5,10	8,9.3	11,11	16,18		
JXWXT8 (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		

TABLE 1

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

Item 3 - STR Results

JYRGV9 (5841)	3	<i>Identifiler® DIRECT</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
KPZHG9 (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
KXRZVG (5840)	3	<i>PowerPlex® Fusion</i>					
		17.3,17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16,16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18
LDZDQK (5840)	3	<i>Identifiler®</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11	16,18
M64XF7 (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
MDJG XK (5841)	3	<i>PowerPlex® Fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18
MQ8JFC (5842)	3	<i>PowerPlex® 16, GlobalFiler Express</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		9,11	5,10	12,25.2	8,9.3	11	16,18

TABLE 1

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

Item 3 - STR Results

MYX2UK (5840)	3	<i>PowerPlex® Fusion</i>					
		17,3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18
NAE97F (5840)	3	<i>PowerPlex® PP18D</i>					
			12,16		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		17,26	27,28		X,Y	10,11	21,25
		9,11	5,10		8,9.3	11	16,18
NGEMU2 (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
NP779A (5840)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
					8,9.3	11,11	16,18
PT6JTE (5840)	3	<i>GlobalFiler</i>					
		17,3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
				12,25.2	8,9.3	11	16,18
PW8H48 (5841)	3	<i>DNATyper 19</i>					
			17,26		16,18	11,12	9,10
		15,16		18,21	12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			5,10		8,9.3	11	16,18
PZHRUF (5840)	3	<i>PowerPlex® 16HS</i>					
					16,18	11,12	9,10
		15,16			12,13	8,9	12,18
			27,28		X,Y	10,11	21,25
		9,11	5,10		8,9.3	11,11	16,18

TABLE 1

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

Item 3 - STR Results

QGP9G9 (5840)	3	<i>PowerPlex® 18D</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
	9,11	5,10		8,9.3	11	16,18	
RRLCK3 (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
TAXLY9 (5841)	3	<i>PowerPlex® Fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
	9,11	5,10		8,9.3	11	16,18	
TKY9Q6 (5840)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
TVFTB2 (5841)	3	<i>Identifiler® DIRECT</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
U226MA (5840)	3	<i>GlobalFiler</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
		12,25.2	8,9.3	11	16,18		
UAGP79 (5840)	3	<i>PowerPlex® Fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
	9,11	5,10		8,9.3	11	16,18	

TABLE 1

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

Item 3 - STR Results

UCY9Q3 (5841)	Identifiler® DIRECT	3	17,26		16,18	11,12	9,10
			15,16		12,13	8,9	12,18
			12,16	27,28	X,Y	10,11	21,25
					8,9.3	11,11	16,18
ULNUW2 (5841)	Identifiler® Direct	3	17,26		16,18	11,12	9,10
			15,16		12,13	8,9	12,18
			12,16	27,28	X,Y	10,11	21,25
					8,9.3	11,11	16,18
UM6QP2 (5841)	Identifiler® DIRECT	3	17,26		16,18	11,12	9,10
			15,16		12,13	8,9	12,18
			12,16	27,28	X,Y	10,11	21,25
					8,9.3	11,11	16,18
UMJDY3 (5841)	Identifiler® Direct	3	17,26		16,18	11,12	9,10
			15,16		12,13	8,9	12,18
			12,16	27,28	X,Y	10,11	21,25
					8,9.3	11,11	16,18
UVWA3A (5841)	Global Filer	3	17.3	17,26	11,14	16,18	11,12
			15,16	14,15	18,21	12,13	8,9
			12,16	27,28	16	X,Y	10,11
			-	-	12,25.2	8,9.3	11
VDABD2 (5841)	Identifiler® Direct	3	17,26		16,18	11,12	9,10
			15,16		12,13	8,9	12,18
			12,16	27,28	X,Y	10,11	21,25
					8,9.3	11,11	16,18
VFETF4 (5840)	PowerPlex® Fusion	3	17.3,17.3	17,26	11,14	16,18	11,12
			15,16	14,15	18,21	12,13	8,9
			12,16	27,28	16,16	X,Y	10,11
			9,11	5,10		8,9.3	11,11

TABLE 1

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

Item 3 - STR Results

VMZTRA (5840)	3	<i>Globalfiler</i>					
		17,3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
			12,25.2	8,9.3	11	16,18	
VT6PDV (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
VYPQT9 (5840)	3	<i>PowerPlex® 18D</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
	9,11	5,10		8,9.3	11	16,18	
VZL9UA (5840)	3	<i>PowerPlex® 18D</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
	9,11	5,10		8,9.3	11	16,18	
WXCF2 (5841)	3	<i>Identifiler® Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
XDMGPW (5841)	3	<i>Identifiler® DIRECT</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
Y3WHBW (5842)	3	<i>DNATyper 19</i>					
			17,26		16,18	11,12	9,10
		15,16		18,21	12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
		5,10		8,9.3	11	16,18	

TABLE 1

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

Item 3 - STR Results

Y4RZDX (5841)	3	<i>Identifiler® Plus</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
Y8CTPZ (5842)	3	<i>PowerPlex® Fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
	9,11	5,10	8,9.3	11	16,18		
Y8R9G9 (5841)	3	<i>PowerPlex® Fusion</i>					
		17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16	X,Y	10,11	21,25
	9,11	5,10	8,9.3	11	16,18		
YFN4GR (5841)	3	<i>Identifiler® DIRECT</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
YYW7FW (5841)	3	<i>Identifiler® Identifiler Direct</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		
ZXMGUY (5840)	3	<i>PowerPlex® Fusion</i>					
		17.3,17.3	17,26	11,14	16,18	11,12	9,10
		15,16	14,15	18,21	12,13	8,9	12,18
		12,16	27,28	16,16	X,Y	10,11	21,25
	9,11	5,10	8,9.3	11,11	16,18		
ZYVT8U (5841)	3	<i>Identifiler® DIRECT</i>					
			17,26		16,18	11,12	9,10
		15,16			12,13	8,9	12,18
		12,16	27,28		X,Y	10,11	21,25
			8,9.3	11,11	16,18		

YSTR Results

TABLE 2

WebCode (Test)	Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
		DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	YInDel	

Item 1 - YSTR Results

3UBML6 (5841)	PowerPlex Fusion 1							10	
4LE8CQ (5841)	Yfiler® 1	13 15	15,17 10	12 11	28 21	24 15	10 16	11	12
4MRGPX (5841)	Yfiler® 1	13 15	15,17 10	12 11	28 21	24 15	10 16	11	12
4QA2AR (5840)	Yfiler® YFiler® plus 1	13 15	15,17 10 17	12 11 17	28 21 22	24 15	10 16	11 23	12 11
6TTDL3 (5840)	PowerPlex® Y 23 1	13 15	15,17 10	12 11	28 21	24 15	10 16	11 23	12 11
6UPLYT (5840)	Yfiler® 1	13 15	15,17 10	12 11	28 21	24 15	10 16	11	12
7JHBZ2 (5840)	PowerPlex® Y 23 1	13 15	15,17 10	12 11	28 21	24 15	10 16	11 23	12 11
8RRZDZ (5841)	Power Plex Fusion 1							10	
C9GY9F (5841)	Yfiler® 1	13 15	15,17 10	12 11	28 21	24 15	10 16	11	12
CE6JCV (5841)	PowerPlex Fusion 1							10	

TABLE 2

WebCode	Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
(Test)		DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
		DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	YInDel	

Item 1 - YSTR Results

D2YQKJ (5840)	DNATyper Y24 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		
D87AMH (5840)	1						10		
G96Q8H (5840)	PowerPlex® Y 23 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16	23	11
		12	17	17	22	9	12		
GTDVXC (5841)	Yfiler® 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		
HT9XZL (5841)	PowerPlex® Fusion 1						10		
J4KKND (5840)	Yfiler® 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		
MDJGXX (5841)	PowerPlex Fusion 1						10		
MQ8JFC (5842)	Yfiler® , GlobalFiler Express 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12	2	
MYX2UK (5840)	PowerPlex® Y 23 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16	23	11
		12	17	17	22	9	12		
PW8H48 (5841)	DNATyper Y24 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		

TABLE 2

WebCode (Test)	Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
		DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	YInDel	

Item 1 - YSTR Results

RRLCK3 (5841)	Yfiler® 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		
TAXLY9 (5841)	Yfiler® 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		
U226MA (5840)	GlobalFiler 1						10		
									2
UCY9Q3 (5841)	Yfiler® 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		
UVWA3A (5841)	Global Filer 1	-	-	-	-	-	10	-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	2
VMZTRA (5840)	Globalfiler 1						10		
									2
WXCF2 (5841)	Yfiler® 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		
Y3WHBW (5842)	DNATyper Y24 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		
Y4RZDX (5841)	Yfiler® 1	13	15,17	12	28	24	10	11	12
		15	10	11	21	15	16		
					22		12		
Y8R9G9 (5841)	PowerPlex® Fusion 1						10		

TABLE 2

WebCode	Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
		DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	YIndel	

Item 2 - YSTR Results

3UBML6 (5841)	PowerPlex Fusion 2								
4LE8CQ (5841)	Yfiler® 2								
4MRGPX (5841)	Yfiler® 2								
6TTDL3 (5840)	PowerPlex® Y 23 2								
7JHBZ2 (5840)	PowerPlex® Y 23 2								
8RRZDZ (5841)	power plex fusion 2								
C9GY9F (5841)	Yfiler® 2								
CE6JCV (5841)	PowerPlex Fusion 2								
GTDVXC (5841)	Yfiler® 2								
HT9XZL (5841)	PowerPlex® Fusion 2								

TABLE 2

WebCode (Test)	Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
		DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	YIndel	

Item 2 - YSTR Results

MDJGXX (5841)	PowerPlex Fusion 2	[REDACTED]								
MYX2UK (5840)	PowerPlex® Y 23 2	[REDACTED]								
RRLCK3 (5841)	Yfiler® 2	[REDACTED]								
TAXLY9 (5841)	Yfiler® 2	[REDACTED]								
UCY9Q3 (5841)	Yfiler® 2	[REDACTED]								
UWWA3A (5841)	Global Filer 2	-	-	-	-	-	NR	-	-	
		-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	NR	-	
WXCF2 (5841)	Yfiler® 2	[REDACTED]								
Y4RZDX (5841)	Yfiler® 2	[REDACTED]								
Y8R9G9 (5841)	PowerPlex® Fusion 2	[REDACTED]								

TABLE 2

WebCode	Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
(Test)		DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
		DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	YIndel	

Item 3 - YSTR Results

3UBML6 (5841)	Powerplex Fusion 3							10	
[Redacted]									
4LE8CQ (5841)	Yfiler® 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16		
					23		12		
4MRGFX (5841)	Yfiler® 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16		
					23		12		
4QA2AR (5840)	Yfiler® YFiler® plus 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16	25	12
			19	18	23		12		
6TTDL3 (5840)	PowerPlex® Y 23 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16	25	12
		12	19	18	23	10	12		
6UPLYT (5840)	Yfiler® 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16		
					23		12	2	
7JHBZ2 (5840)	PowerPlex® Y 23 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16	25	12
		12	19	18	23	10	12		
8QXA9L (5841)	PowerPlex® Y 3								
[Redacted]									
8RRZDZ (5841)	power plex fusion 3							10	
[Redacted]									
C9GY9F (5841)	Yfiler® 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16		
					23		12		

TABLE 2

WebCode (Test)	Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
		DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
		DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	YIndel	

Item 3 - YSTR Results

CE6JCV (5841)	PowerPlex Fusion 3						10		
D2YQKJ (5840)	DNATyper Y24 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16		
					23		12		
D87AMH (5840)	3						10		
G96Q8H (5840)	PowerPlex® Y 23 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16	25	12
		12	19	18	23	10	12		
GTDVXC (5841)	Yfiler® 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16		
					23		12		
HT9XZL (5841)	PowerPlex® Fusion 3						10		
J4KKND (5840)	Yfiler® 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16		
					23		12		
MDJGXX (5841)	PowerPlex Fusion 3						10		
MQ8JFC (5842)	Yfiler® , GlobalFiler Express 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16		
					23		12	2	
MYX2UK (5840)	PowerPlex® Y 23 3	15	11,14	14	30	25	10	11	13
		14	11	11	20	17	16	25	12
		12	19	18	23	10	12		

TABLE 2

WebCode	Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
(Test)		DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
		DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	YIndel	

Item 3 - YSTR Results

PW8H48 (5841)	DNATyper Y24 3	15	11,14	14	30	25	10	11	13	
		14	11	11	20	17	16			
		23						12		
RRLCK3 (5841)	Yfiler® 3	15	11,14	14	30	25	10	11	13	
		14	11	11	20	17	16			
		23						12		
TAXLY9 (5841)	Yfiler® 3	15	11,14	14	30	25	10	11	13	
		14	11	11	20	17	16			
		23						12		
U226MA (5840)	GlobalFiler 3						10			
								2		
UCY9Q3 (5841)	Yfiler® 3	15	11,14	14	30	25	10	11	13	
		14	11	11	20	17	16			
		23						12		
UWWA3A (5841)	Global Filer 3	-	-	-	-	-	10	-	-	
		-	-	-	-	-	-	-	-	
								2		
VMZTRA (5840)	Globalfiler 3						10			
								2		
WXCF2 (5841)	Yfiler® 3	15	11,14	14	30	25	10	11	13	
		14	11	11	20	17	16			
		23						12		
Y3WHBW (5842)	DNATyper Y24 3	15	11,14	14	30	25	10	11	13	
		14	11	11	20	17	16			
		23						12		
Y4RZDX (5841)	Yfiler® 3	15	11,14	14	30	25	10	11	13	
		14	11	11	20	17	16			
		23						12		

TABLE 2

WebCode	Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
(Test)		DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
		DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4	YIndel	

Item 3 - YSTR Results

Y8R9G9 (5841)	PowerPlex® Fusion 3							10		
										

Additional DNA Results

TABLE 3

Locus	WebCode	(Test)	Item 1	Item 2	Item 3
D12S391	4QA2AR	(5840)	18,24	17,3,21	18,21
D1S1656	4QA2AR	(5840)	11,11	15,17,3	17,3,17,3
D6S1043	4QA2AR	(5840)	12,13	11,21,3	12,12
	D2YQKJ	(5840)	12,13	11,21,3	12
	J4KKND	(5840)	12,13	11,21,3	12,12
	PW8H48	(5841)	12,13	11,21,3	12
	Y3WHBW	(5842)	12,13	11,21,3	12
DYS391	2ZM4MU	(5840)	10		10
	67J3MU	(5840)	10		10
	8CJ2BN	(5840)	10		10
	CHA67N	(5842)	10	n/a	10
	D87AMH	(5840)	10		10
	DMKHNL	(5840)	10		10
	PT6JTE	(5840)	10		10
	VFETF4	(5840)	10		10
	Y8CTPZ	(5842)	10		10
	ZXMGUY	(5840)	10		10
DYS444	D2YQKJ	(5840)	12		14
	PW8H48	(5841)	12		14
	Y3WHBW	(5842)	12		14
DYS447	D2YQKJ	(5840)	24		23
	PW8H48	(5841)	24		23
	Y3WHBW	(5842)	24		23
DYS460	D2YQKJ	(5840)	12		11
	PW8H48	(5841)	12		11
	Y3WHBW	(5842)	12		11
DYS522	D2YQKJ	(5840)	11		10
	PW8H48	(5841)	11		10
	Y3WHBW	(5842)	11		10
DYS527	D2YQKJ	(5840)	23,24		20,21,23
	PW8H48	(5841)	23,24		20,21,23
	Y3WHBW	(5842)	23,24		20,21,23
DYS617	D2YQKJ	(5840)	13		12
	PW8H48	(5841)	13		12
	Y3WHBW	(5842)	13		12
Y INDEL	CHA67N	(5842)	2	n/a	2
Yindel	PT6JTE	(5840)	2		2

Additional Comments

TABLE 4

WebCode (Test)	Additional Comments
47MABV (5840)	[Laboratory] Batch 1558
4MRGPX (5841)	Item #2 - No results w/ Yfiler. Amelo shows [female symbol], so I wouldn't expect results.
6KZZTU (5842)	Data stored in LIMS case 2016-8000728.
77D8GT (5842)	Proficiency Test, 2016-8000729 performed as manual direct amplification using PowerPlex 18D Direct amplification kit.
CHA67N (5842)	Item 1 was extracted a second time using the EZ1 and GlobalFiler amplification kit; the profile was 100% concordant with what was obtained using the GlobalFiler Express kit.
GTDVXC (5841)	YFILER - ITEM 2 - NO MALE DNA DETECTED
QGP9G9 (5840)	Item 1 (201602845) & Item 3 (201602847) in Batch 1571. Item 2 (201602846) in Batch 1572.
RRLCK3 (5841)	ITEM 2 - NO MALE DNA
UVWA3A (5841)	NR = No Result.
Y4RZDX (5841)	NO MALE DNA DETECTED FROM ITEM 2.
ZXMGUY (5840)	[Participant code]-02 was punched and run twice with our Fusion Direct Amp protocol. Neither run produced a full profile, with both having one loci exhibit dropout. Per our SOP, the profile reported is a composite of the two profiles.

Collaborative Testing Services ~ Forensic Testing Program

Test No. 16-5840/5841/5842: DNA Database - SalivaDATA MUST BE RECEIVED BY April 18, 2016 TO BE INCLUDED IN THE REPORT

Participant Code:

Report Code:

Accreditation Release Statement

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

Scenario:

Three known buccal/saliva standards were collected from identified subjects and are provided to your laboratory for analysis for database purposes. You are requested to perform DNA analyses (STR and YSTR) on these known standards and report the allelic results that would be recorded in the database.

Items Submitted:**Sample Pack DBF1- FTA Indicating Micro Card (16-5840):****Sample Pack DBB1- Bode Buccal Collector (16-5841):****Sample Pack DBS1- Puritan CapSure Swabs (16-5842):**

Item 1: Known buccal/saliva standard from Individual 1

Item 2: Known buccal/saliva standard from Individual 2

Item 3: Known buccal/saliva standard from Individual 3

Part I: DNA ANALYSIS (on following pages)**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 (no spaces necessary).
- * Follow your laboratory procedures for reporting homozygotes (i.e. X,X or X).

Please return all pages of this data sheet.

Page 1 of 6

Part I (continued): DNA Results 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, Plus, Direct, 16 HS, etc.).

<input type="checkbox"/> COfiler®/Profiler Plus® _____	<input type="checkbox"/> PowerPlex® _____
<input type="checkbox"/> Identifiler® _____	<input type="checkbox"/> Other _____

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

<input type="checkbox"/> Yfiler® _____	<input type="checkbox"/> PowerPlex® Y _____
<input type="checkbox"/> Other _____	

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

Additional DNA Results for Item 1

Please use the section below to report results only for loci not available in the above tables.

_____	<input type="checkbox"/>	_____	<input type="checkbox"/>
_____	<input type="checkbox"/>	_____	<input type="checkbox"/>

Part I (continued): DNA Results 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, Plus, Direct, 16 HS, etc.).

<input type="checkbox"/> COfiler®/Profiler Plus® _____	<input type="checkbox"/> PowerPlex® _____
<input type="checkbox"/> Identifiler® _____	<input type="checkbox"/> Other _____

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

<input type="checkbox"/> Yfiler® _____	<input type="checkbox"/> PowerPlex® Y _____
<input type="checkbox"/> Other _____	

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

Additional DNA Results for Item 2

Please use the section below to report results only for loci not available in the above tables.

_____	<input type="checkbox"/>	_____	<input type="checkbox"/>
_____	<input type="checkbox"/>	_____	<input type="checkbox"/>

Part I (continued): DNA Results 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, Plus, Direct, 16 HS, etc.).

<input type="checkbox"/> COfiler®/Profiler Plus® _____	<input type="checkbox"/> PowerPlex® _____
<input type="checkbox"/> Identifiler® _____	<input type="checkbox"/> Other _____

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

<input type="checkbox"/> Yfiler® _____	<input type="checkbox"/> PowerPlex® Y _____
<input type="checkbox"/> Other _____	

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

Additional DNA Results for Item 3

Please use the section below to report results only for loci not available in the above tables.

_____	<input type="checkbox"/>	_____	<input type="checkbox"/>
_____	<input type="checkbox"/>	_____	<input type="checkbox"/>

Part II: ADDITIONAL COMMENTS

Comments regarding any part of this test.

Written conclusions (including statistical information) for DNA analysis are not required.

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.

<p>Return Instructions: Data must be received via online data entry, fax (please include a cover sheet), or mail by <i>April 18, 2016</i> to be included in the report.</p>	<p>Participant Code:</p> <p>ONLINE DATA ENTRY: www.cts-portal.com</p>
<p>QUESTIONS? TEL: +1-571-434-1925 (8 am - 4:30 pm EST) EMAIL: forensics@cts-interlab.com www.ctsforensics.com</p>	<p>FAX: +1-571-434-1937 MAIL: Collaborative Testing Services, Inc. P.O. Box 650820 Sterling, VA 20165-0820 USA</p>

Please return all pages of this data sheet.

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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. **16-5840/5841/5842: DNA Database - Saliva**

This release page must be completed and received by **April 18, 2016** to have this participant's submitted data included in the reports forwarded to the respective Accreditation Bodies.

ASCLD/LAB RELEASE

If your lab has been accredited by ASCLD/LAB and you are submitting this data as part of their external proficiency test requirements, have the laboratory's designated individual complete the following.

The information below must be completed in its entirety for the results to be submitted to ASCLD/LAB.

ASCLD/LAB Legacy Certificate No. _____ ASCLD/LAB International Certificate No. _____

Signature _____ Date _____

Laboratory Name _____

Location (City/State) _____

ANAB RELEASE

If your laboratory maintains its accreditation through ANAB, please complete the following form in its entirety to have your results forwarded.

ANAB Certificate No. _____

Signature and Title _____ Date _____

Laboratory Name _____

Location (City/State) _____

Accreditation Release**Return Instructions**

Please submit the completed Accreditation Release at the same time as your full data sheet. See Data Sheet Return Instructions on the previous page.

*Questions? Contact us 8 am-4:30 pm EST
Telephone: +1-571-434-1925
email: forensics@cts-interlab.com*

Please return all pages of this data sheet.

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