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DNA Interpretation Test No. 19-589 Summary Report

Each participant received a sample pack consisting of a digital download packet through the CTS portal containing electropherograms and raw data files which they were requested to evaluate using their existing protocols. Data were returned from 38 participants and are compiled into the following tables:

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

Manufacturer's Information

Each sample pack contained digital files consisting of electropherograms from DNA profiles of two known samples (Items 1 & 2) and two questioned samples (Items 3 & 4). Participants were requested to evaluate the electropherograms and interpret the data using their existing protocols.

SAMPLE PREPARATION: Item 1 was created using blood collected from a male donor. Item 2 was created using blood collected from a female donor. The Item 3 mixture was created by combining two parts of blood from the Item 2 female donor and three parts of blood from a 3rd party female donor. The Item 4 mixture was created by combining five parts of blood from the Item 2 female donor, two parts of blood from a 3rd party male donor, and two parts of blood from a 4th party female donor.

SAMPLE SET ASSEMBLY: Once sample preparation and verification was completed, the digital upload was checked to ensure all items were accessible.

VERIFICATION: Laboratories that conducted predistribution testing of the electropherograms reported consistent results for all loci. All associations were consistent amongst the predistribution laboratories.

Consensus data on the following pages was determined by ensuring at least 10 participants returned results for the locus. Each allele listed was determined by ensuring that at least 75% of participants that returned data for that specific locus and item had reported the same allele.

		Amo	elogenin and STI	R Results		
	Results c	compiled by predi	stribution laboratories	and a consensus	of participants.	
Item	D1S1656 D8S1179 D19S433 Penta D	D251338 D1051248 D21511 Penta E	D2S441 D12S391 D22S1045 SE33	D3S1358 D13S317 Amelogenin TH01	D5S818 D16S539 CSF1PO TPOX	D7S820 D18S51 FGA vWA
	DYS391	DYS570	DY\$576	Y Indel		
1	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13 9,12	30,30 10,11	15,18 17,27.2	X,Y	10,10	25,28
	9,12	17	17,27.2	8,9.3 2	6,8	14,16
2	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19
	NM	NM	NM	NM		
3	12,13,16,16.3†	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
	8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
	NM	NM	NM	NM		
3major	*	*	11	*	13	*
	*	13	20	10	12	*
	14	28	15	X,X	11	22,24
	*	*	*	6	8	15
	NM	NM	NM	NM		
3minor	*	*	11	*	13	*
	*	*	*	*	*	*
	*	*	*	X,X	11	22
	*	*	*	*	8	*
	NM	NM	NM	NM		
4	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17	2		

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

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

 $[\]dagger$ Additional alleles may be present depending on laboratory thresholds and/or amplification kit used.

	YSTR Results										
	Results compiled from predistribution laboratories and a consensus of participants.										
ltem	DYS19	DYS385	DYS389-I	DYS389-11	DYS390	DYS391	DYS392	DYS393			
	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533			
	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4					
1	16	12,12	14	29	25	9	11	14			
	15	10	11	21	13	17	21	12			
	9	17	17	21	12	11					
4	17	11,14	14	31	25	11	11	13			
	14	11	10	19	16	15	23	12			
	12	20	17	23	11	11					

Summary Comments

This test was designed to allow participants to assess their proficiency in evaluating electropherograms (EPGs) and interpreting data. Each participant received electropherograms (in FSA, HID, and PDF formats, as available) of two reference items and two evidence items. The EPG data included were produced from the following amplification kits: GlobalFiler™, Investigator® 24plex, PowerPlex® Fusion 5C, PowerPlex® Fusion 6C, YFiler™, PowerPlex® Y23.

Item 1 was the male victim's reference sample. Item 2 was the female suspect's reference sample. Item 3 was a mixture of samples from two individuals, the female suspect and a 3rd party female contributor for whom no reference sample was provided (2:3 ratio respectively). Item 4 was a mixture of samples from three individuals including the female suspect, a 4th party female contributor, and a 3rd party male contributor (5:2:2 ratio respectively); no reference samples were provided for the 4th party female or 3rd party male in Item 4.

Consensus results for each item were determined per allele for each locus. Allele determinations were identified by ensuring that at least 10 participants reported results for the locus and that of these participants, 75% of them reported the same allele(s). Results that differed from the consensus were further compared to the participant's reported interpretation guidelines.

STR Data

Thirty-eight participants evaluated the provided STR data. The most frequently reported amplification kit utilized was GlobalFiler™. For reference Item 1, 35 participants reported data that were concordant with the consensus. For reference Item 2, 37 participants reported data that were concordant with the consensus.

For questioned Item 3, 10 participants attempted the deconvolution of this mixture reporting both a major and a minor profile. A consensus was formed for major and minor profiles at 15 and six loci, respectively. All 10 participants reported major and minor profiles concordant with the consensus. A consensus was achieved for the full Item 3 profile (unseparated), with some participants reporting additional alleles at D1S1656 when utilizing differing analytical thresholds and/or amplification kits for interpretation. Thirty-seven participants reported results in line with the consensus and their reported interpretation guidelines. One participant reported an inconsistency at SE33.

For questioned Item 4, two participants attempted the deconvolution of this mixture. Therefore, no consensus was formed for major and minor profiles. When using their indicated interpretation guidelines and amplification kit data, all participants reported results in line with the consensus except for one participant that reported an inconsistent result at FGA.

YSTR Data

Twenty-six participants reported YSTR results.

For reference Item 1, all participants reported allelic responses that were concordant with the consensus.

For questioned Item 4, all respondents reported results that were concordant with the consensus except for five participants. Two participants reported inconsistent results at DYS385 and DYS389-I. When using their indicated interpretation guidelines and amplification kit data, three participants reported "24,25" at DYS390 whereas consensus was "25".

Conclusions

For Item 3, 35 participants reported two (or at least two) contributors and three participants did not report for number of contributors. When comparing the Item 3 mixture profile with the Item 1 (victim) reference profile, all participants reported that the victim was excluded as a component of the mixture. When comparing the Item 3 mixture profile with the Item 2 (suspect) reference profile, all participants reported that the suspect was included as a component of the mixture.

For Item 4, 35 participants reported that three (or at least three) individuals contributed to the mixture and two did not report a response for number of contributors. One participant reported greater than three contributors. When comparing the Item 4 mixture profile with the Item 1 (victim) reference profile, 31 participants reported that the victim was excluded as a component of the mixture and seven reported inconclusive/uninterpretable. When comparing the Item 4 mixture profile with the Item 2 (suspect) reference profile, 29 participants reported that the victim was included as a component of the mixture and nine reported inconclusive/uninterpretable.

Interpretation Guidelines

WebCode	Analytical Threshold (rfu)	Peak Height Ratio (%)	Stochastic Threshold (rfu)			
29L4L4	[Participant did not provide interpretation guidelines]					
2X3NH2	75 rfu	60%	75 rfu			
3GXG4Y	STR B:45, G:72, Y:38, R:70, P:55. Y-STR B:57, G:57, Y:41, R:28	60	132			
4N93P9	75	60	100			
733884	90 rfu: (GlobalFiler)	60%: (GlobalFiler)	400 rfu: (GlobalFiler)			
AFYKVQ	190	50%	1160			
AGBJQY	150 / 75	60% / 50%	700 / 75			
AQZ8MM	1160	50	190			
C72T4E	75	60	230			
EMZPCN	STR Analysis: 200 rfu, YSTR Analysis: 50 rfu	STR Analysis: 70%, YSTR Analysis: 70%	STR Analysis: 800 rfu, YSTR Analysis: 200 rfu			
FJVGLJ	100	60	100			
FY8V3G	190	50	1160			
G3QA7G	190 rfu	50%	1160 rfu			
GXRVJR	75 rfu	60%	100 rfu			
GZZ8ZT	40RFU (GF, PPF5C, PPF6C, Investigator, PPY23, YF)	NA (Probabilistic Genotyping)	NA (Probabilistic Genotyping)			
HBZXJF	75	60	100			
HJ738P	100 RFU	55-100%	325 RFU			
JLR7H9	150 RFU	70%	600 RFU			
K6XYXF	150 rfu	60% >2000 rfu and >35% <2000 rfu	750 ศ์บ			
KBP98D	190 rfu	50%	1160 rfu			
KNVYAL	No Interp guidlines for autosomal profiling systems included with this test.					
L48ZJG	100 rfu	60%	300 rfu			
LRT3ED	75 rfu	60%(STR Analysis), 50%(YSTR Analysis)	100rfu(STR Analysis), 75rfu(YSTR Analysis)			
LVQJQ8	Dye channel-specific: Blue: 345 RFU/ Green:125 RFU/ Yellow: 240 RFU/ Red: 155 RFU/ Purple: 130 RFU	Locus-specific, minimum PHR (%) ranging between 61% 81%	Dye channel-specific: Blue: 820 RFU/ Green: 430 RFU/ Yellow: 735 RFU/ Red: 650 RFU/ Purple: 500 RFU			
LWNUKP	75rfu (GF & yFiler)	60% (GF), 50% (yFiler)	100rfu (GF), 75rfu (yFiler)			
N34BTG	75	60	100			
NNJWPH	75,50	70,60	200,175			
NWHQ2H	70	60	500			

		., ., .,	
WebCode	Analytical Threshold (rfu)	Peak Height Ratio (%)	Stochastic Threshold (rfu)
P9K89B	75 rfu	60%	100 rfu
QL6949	190 RFU	50%	1160 RFU
UKZM6X	175 rfu	50%	1000 rfu
V49CTF	75 rfu, 75 rfu	60%, 50%	100 rfu, 75 rfu
VU7RT9	75	60	100
W6YVA8	75 rfu (we used your guidlines because we believe this treshold is laboratory specific and cannot be used to interpret foreign profiles)	60%(we used your guidlines because we believe this treshold is laboratory specific and cannot be used to interpret foreign profiles)	100 rfu (we used your guidlines because we believe this treshold is laboratory specific and cannot be used to interpret foreign profiles)
WBP6K7	[Participant die	d not provide interpretation guideli	nes]
ZBXHF4	STR: 75 RFU - YSTR: 75 RFU	STR: 60 % - YSTR: 50 %	STR: 100 RFU - YSTR: 75 RFU
ZHFNEW	190	50	1160
ZVZW34	B 125RFU, GY 150RFU, P 175 RFU, R 225RFU	50	900 single source, 2000 mixtures

STR & Amelogenin Results

WebCode	Amplification D1S1656	n Kits (File Format) D2S1338	D2\$441	D3S1358	D5S818	D7\$820
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
Item	D19\$433	D21S11	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	ТРОХ	vWA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 1 - STR	Results		
29L4L4	GlobalFiler ¹	™, Investigator® 24plex	, PowerPlex® Fusio	on 5C, PowerPlex® Fu	sion 6C (PDF Form	at)
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
	9,12	10,11	17,27.2	8,9.3	6,8	14,16
	9	17	17	2		
2X3NH2	GlobalFiler ¹	гм				
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
			17,27.2	8,9.3	6,8	14,16
	9,9					
3GXG4Y	PowerPlex®	Fusion 6C (PDF Form	at), (HID Format)			
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
	9,12	10,11	17,27.2	8,9.3	6,8	14,16
	9	17	17			
1N93P9	GlobalFiler ¹	™ (PDF Format)				
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12	9,12	12,13
	13	30	15,18	X,Y	10	25,28
			17,27.2	8,9.3	6,8	14,16
	9			2		
733884	GlobalFiler ¹	™ (PDF Format)				
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
			17,27.2	8,9.3	6,8	14,16
	9,9			2		
AFYKVQ	PowerPlex®	Fusion 5C (FSA Forma	at)			
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
	9,12	10,11		8,9.3	6,8	14,16
	9					

WebCode	etation Amplification	n Kits (File Format)				Test 19-58
webCode	D1S1656	D2S1338	D2S441	D3S1358	D5\$818	D7\$820
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
tem	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 1 - STR	Results		
AGBJQY	GlobalFiler ¹	™ (PDF Format)				
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
			17,27.2	8,9.3	6,8	14,16
	9			2		
AQZ8MM	PowerPlex®	Fusion 5C (FSA Forn	nat)			
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,INC	30,INC	15,18	X,Y	10,10	25,28
	9,12	10,11	.5,15	8,9.3	6,8	14,16
	9	,			,-	
C72T4E	Dower Dlov®	Fusion 6C (HID Form	a atl			
~/ ∠ I †† L	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12	9,12	12,13
	13	30	15,18	X,Y	10	25,28
	9,12	10,11	17,27.2	8,9.3	6,8	14,16
	9	17	17,27.2	0,7.0	0,0	14,10
1.47DC\1			.,			
MZPCN		™ (HID Format)				0.10
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
	-	-	17,27.2	8,9.3	6,8	14,16
	9	-	-	2		
JVGLJ		™, PowerPlex® Fusion				
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12	9,12	12,13
_	13	30	15,18	X,Y	10	25,28
	9,12	10,11	17,27.2	8,9.3	6,8	14,16
	9			2		
Y8V3G	PowerPlex®	Fusion 5C (PDF Form	nat)			
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
	9,12	10,11		8,9.3	6,8	14,16
	9					
G3QA7G	PowerPlex®	Fusion 5C (FSA Forn	nat)			
0	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,inc.	30,inc.	15,18	X,Y	10,10	25,28
	9,12	10,11	not tested	8,9.3	6,8	14,16
	9	not tested	not tested	not tested		,

WebCode		Kits (File Format)	D054040	D001050 D50010			
	D1S1656 D8S1179	D2S1338 D10S1248	D2S441 D12S391	D3S1358 D13S317	D5S818 D16S539	D7S820 D18S51	
tem			D123391	Amelogenin	CSF1PO	FGA	
	Penta D	Penta D Penta E	SE33	TH01	TPOX	vWA	
	DYS391	DYS570	DYS576	Y Indel			
			Item 1 - STR				
GXRVJR	GlobalFiler™	™, Investigator® 24pl		on 5C, PowerPlex® Fu	usion 6C (PDF Form	at), (HID Format)	
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12,12	9,12	12,13	
	13,13	30,30	15,18	X,Y	10,10	25,28	
	9,12	10,11	17,27.2	8,9.3	6,8	14,16	
	9,9	17	17	2			
GZZ8ZT	GlobalFiler [†] (HID Format		ex, PowerPlex® Fusio	on 5C, PowerPlex® Fu	usion 6C (FSA Forma	at), (PDF Format)	
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12	9,12	12,13	
	13	30	15,18	X,Y	10	25,28	
	9,12	10,11	17,27.2	8,9.3	6,8	14,16	
	9	17	17	2			
HBZXJF	GlobalFiler [™]	™ (HID Format)					
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12	9,12	12,13	
	13	30	15,18	X,Y	10	25,28	
			17,27.2	8,9.3	6,8	14,16	
	9			2			
HJ738P	GlobalFiler [™]	™ (PDF Format)					
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12,12	9,12	12,13	
	13,13	30,30	15,18	X,Y	10,10	25,28	
			17,27.2	8,9.3	6,8	14,16	
	9			2			
LR7H9	GlobalFiler [™]	М					
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12	9,12	12,13	
	13	30	15,18	X,Y	10	25,28	
			17,27.2	8,9.3	6,8	14,16	
	9			2			
<6XYXF	GlobalFiler™	™ (PDF Format)					
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12,12	9,12	12,13	
	13,13	30,30	15,18	X,Y	10,10	25,28	
			17,27.2	8,9.3	6,8	14,16	
	9			2			
(BP98D	PowerPlex®	Fusion 5C (FSA Forr	mat)				
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12,12	9,12	12,13	
	13,13	30,30	15,18	X,Y	10,10	25,28	
	9,12	10,11		8,9.3	6,8	14,16	
	9	, , , , , , , , , , , , , , , , , , , ,		,,,,	/-		

WebCode		n Kits (File Format)				
_	D1\$1656	D2\$1338	D2S441	D3S1358	D5S818	D7S820
	D8S1179	D10S1248	D125391	D13S317 Amelogenin	D16S539	D18\$51
ltem	D19S433 Penta D		D22\$1045 SE33	TH01	CSF1PO TPOX	FGA vWA
	DYS391	DYS570	DYS576	Y Indel	II OX	VWA
		<i></i>	ltem 1 - STR			
KNVYAL	GlobalFiler	тм	ileili i - 31K	Kesulis		
XINV I AL			10.11	15.17	11.10	0.10
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18 17,27.2	X,Y 8,9.3	10,10 6,8	25,28 14,16
	9,9		17,27.2	2	0,0	14,10
				L		
_48ZJG		™ (PDF Format), (HID				
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12	9,12	12,13
	13	30	15,18	X,Y	10	25,28
	0		17,27.2	8,9.3	6,8	14,16
	9			2		
_RT3ED		™, PowerPlex® Fusion				•
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12	9,12	12,13
	13	30	15,18	X,Y	10	25,28
	9,12	10,11	17,27.2	8,9.3	6,8	14,16
	9	17	17	2		
LVQJQ8	PowerPlex®	Fusion 6C (HID Form	nat)			
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12	9,12	12,13
	13	30	15,18	X,Y	10	25,28
	9,12	10,11	17,27.2	8,9.3	6,8	14,16
	9	17	17			
WNUKP	GlobalFiler	™ (PDF Format)				
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
	N/A	N/A	17,27.2	8,9.3	6,8	14,16
	9	N/A	N/A	2		
N34BTG	GlobalFiler	™ (HID Format)				
•	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12	9,12	12,13
	13	30	15,18	X,Y	10	25,28
	-	-	17,27.2	8,9.3	6,8	14,16
	9		-	2		
HPWLNIV		Fusion 6C (HID Form	•	15 14	11 10	0.10
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12	9,12	12,13
	13	30	15,18	X,Y	10	25,28
	9,12	10,11	17,27.2 17	8,9.3	6,8	14,16

WebCode		Amplification Kits (File Format)					
_	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D7\$820	
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51	
tem	D19S433 Penta D	D21S11 Penta E	D22S1045 SE33	Amelogenin TH01	CSF1PO TPOX	FGA vWA	
_	DYS391	DYS570	DYS576	Y Indel	IPOX	VWA	
	D13371	D13370					
			ltem 1 - STR	Kesults			
NWHQ2H		™ (FSA Format)					
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12,12	9,12	12,13	
	13,13	30,30	15,18	X,Y	10,10	25,28	
			17,27.2	8,9.3	6,8	14,16	
	9			2			
9K89B	GlobalFiler	™, PowerPlex® Fusion	5C, PowerPlex® Fu	sion 6C (PDF Format)			
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12	9,12	12,13	
	13	30	15,18	X,Y	10	25,28	
	9,12	10,11	17,27.2	8,9.3	6,8	14,16	
	9	17	17	2			
QL6949	PowerPlay®	Fusion 5C (FSA Form	nat)				
XLU/7/	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12,12	9,12	12,13	
	13,13	30,30	15,18	X,Y	10,10	25,28	
	9,12	10,11 NT	NT NT	8,9.3 NT	6,8	14,16	
			INI	INI			
JKZM6X		™ (PDF Format)					
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12,12	9,12	12,13	
	13,13	30,30	15,18	X,Y	10,10	25,28	
			17,27.2	8,9.3	6,8	14,16	
	9			2			
49CTF	PowerPlex®	Fusion 6C (HID Forr	nat)				
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12	9,12	12,13	
	13	30	15,18	X,Y	10	25,28	
	9,12	10,11	17,27.2	8,9.3	6,8	14,16	
	9	17	17				
U7RT9	GlobalFiler	™ (PDF Format)					
O/RI/	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12,12	9,12	12,13	
	13,13	30,30	15,18	X,Y	10,10	25,28	
	10,10	30,30	17,27.2	8,9.3	6,8	14,16	
	9		17,27.2		0,0	14,10	
		_		2			
V6YVA8		Fusion 6C (PDF Forr	•				
	11,16	19,22	10,11	15,16	11,12	9,10	
	11,15	13,14	18,19	12	9,12	12,13	
	13	30	15,18	X,Y	10	25,28	
	9,12	10,11	17,27.2	8,9.3	6,8	14,16	

WebCode	Amplification D1S1656	n Kits (File Format) D2S1338	D2S441	D3S1358	D5S818	D7\$820
ltem	D8S1179 D19S433	D8S1179 D10S1248 D19S433 D21S11	D12S391	D13S317	D16S539	D18S51
			D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			Item 1 - STR	Results		
WBP6K7	GlobalFiler ¹	™, PowerPlex® Fusion	5C, PowerPlex® Fu	sion 6C (FSA Format)	, (PDF Format)	
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30,30	15,18	X,Y	10,10	25,28
	9,12	10,11	17,27.2	8,9.3	6,8	14,16
	9	17	17	2		
ZBXHF4	GlobalFiler ¹	™ (HID Format)				
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12	9,12	12,13
	13	30	15,18	X,Y	10	25,28
			17,27.2	8,9.3	6,8	14,16
	9			2		
ZHFNEW	PowerPlex®	Fusion 5C (FSA Form	mat)			
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,inconclusive	30,inconclusive	15,18	X,Y	10,10	25,28
	9,12	10,11	not tested	8,9.3	6,8	14,16
	9	not tested	not tested	not tested		
ZVZW34	GlobalFiler ¹	тм				
	11,16	19,22	10,11	15,16	11,12	9,10
	11,15	13,14	18,19	12,12	9,12	12,13
	13,13	30	15,18	X,Y	10,10	25,28
			17,27.2	8,9.3	6,8	14,16
	9			2		

WebCode	Amplification D1S1656	n Kits (File Format) D2S1338	D2S441 D3S1358		DEC010	D7\$820
	DIS1030 D8S1179	D251338 D1051248	D125391	D1351358	D5S818 D16S539	D75820 D18S51
tem	D19S433	D1051248	D2251045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DY\$570	DYS576	Y Indel		
			ltem 2 - STR	Results		
29L4L4	GlobalFiler [™]	™, Investigator® 24plex	κ, PowerPlex® Fusio	on 5C, PowerPlex® Fu	sion 6C (PDF Form	at)
272121	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19
	-	-	-	-		
2X3NH2	GlobalFiler [™]	М				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
			21,28.2	6,9	8,9	15,19
3GXG4Y	PowerPlex®	Fusion 6C (PDF Form	at), (HID Format)			
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19
4N93P9		[™] (PDF Format)				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X	10,11	22,24
			21,28.2	6,9	8,9	15,19
722001	GlobalFiler [™]	м				
733884	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,13	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	17,14.4	20,50	21,28.2	6,9	8,9	15,19
			_ //20.2		3,,	
AFYKVQ	PowerPlex®	Fusion 5C (FSA Form	at)			
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12		6,9	8,9	15,19
	ND					
AGBJQY	GlobalFiler [†]	™ (PDF Format)				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	11,17.4	20,00	21,28.2	6,9	8,9	15,19

WebCode		n Kits (File Format)				
_	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D7\$820
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
tem	D19S433 Penta D	D21S11 Penta E	D22S1045 SE33	Amelogenin TH01	CSF1PO TPOX	FGA vWA
_	DYS391	DYS570	DYS576	Y Indel	IPOX	VWA
	D13371	D13370	Item 2 - STR			
	D D S	. F		Results		
AQZ8MM		Fusion 5C (FSA Form	•			
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12		6,9	8,9	15,19
	ND					
C72T4E		Fusion 6C (HID Form	•			
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19
E. (35.5)	61					
EMZPCN		™ (HID Format)				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	-	-	21,28.2	6,9	8,9	15,19
	-	-	-	-		
FJVGLJ		™, PowerPlex® Fusion 5	5C (FSA Format), (PDF Format)		
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19
F) (0) (0 C	D D O					
FY8V3G		Fusion 5C (PDF Form	,	15.17	11.10	0.10
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12 ND	11,12		6,9	8,9	15,19
C2O 470		F F.C. /FC^ F	- +1			
G3QA7G		Fusion 5C (FSA Forma	•	15 17	11 10	0.10
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12	not tested	6,9	8,9	15,19
	ND	not tested	not tested	not tested		
GXRVJR		™, Investigator® 24plex	, PowerPlex® Fusion		sion 6C (PDF Form	
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19

WebCode	Amplification D1S1656	Kits (File Format) D2S1338	D2S441	D3S1358	D5S818	D7S820
	DIS1030 D8S1179	D251338 D1051248	D25441 D125391	D13S317	D16S539	D75820 D18S51
tem	D19S433	D21S11	D22\$1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 2 - STR	Results		
GZZ8ZT	GlobalFiler™ (HID Format		ex, PowerPlex® Fusio	on 5C, PowerPlex® Fus	sion 6C (FSA Formo	at), (PDF Format
	16,16.3	, 19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
!	14,14.2	28,30	15,16	X	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19
HBZXJF	GlobalFiler™	™ (HID Format)				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
			21,28.2	6,9	8,9	15,19
	NM			NM		
HJ738P	GlobalFiler™	™ (PDF Format)				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
!	14,14.2	28,30	15,16	X,X	10,11	22,24
			21,28.2	6,9	8,9	15,19
	NR			NR		
JLR7H9	GlobalFiler™	м				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
			21,28.2	6,9	8,9	15,19
	NR			NR		
(6XYXF	GlobalFiler™	M (PDF Format)				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X	10,11	22,24
			21,28.2	6,9	8,9	15,19
KBP98D	PowerPlex®	Fusion 5C (FSA Form	nat)			
_	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12		6,9	8,9	15,19
	ND					
KNVYAL	GlobalFiler™	[™] (PDF Format)				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
			21,28.2	6,9	8,9	15,19

WebCode	Amplification D1S1656	n Kits (File Format) D2S1338	D2\$441	D3S1358	D5S818	D7\$820			
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51			
tem	D195433	D21S11	D22S1045	Amelogenin	CSF1PO	FGA			
	Penta D	Penta E	SE33	TH01	TPOX	vWA			
	DYS391	DYS570	DYS576	Y Indel					
			ltem 2 - STR	Results					
L48ZJG	GlobalFiler™ (PDF Format), (HID Format)								
	16,16.3	19,24	11,11.3	15,16	11,13	8,13			
	13,15	13,15	20,22	10,12	11,12	12,14			
2	14,14.2	28,30	15,16	Х	10,11	22,24			
			21,28.2	6,9	8,9	15,19			
LRT3ED	- GlobalFiler [†]	™. PowerPlex® Fusion	5C. PowerPlex® Fu	- sion 6C (FSA Format),	. (PDF Format). (HIC	Format)			
LICIOLD	16,16.3	19,24	11,11.3	15,16	11,13	8,13			
	13,15	13,15	20,22	10,12	11,12	12,14			
2	14,14.2	28,30	15,16	X	10,11	22,24			
	8,12	11,12	21,28.2	6,9	8,9	15,19			
LVQJQ8		Fusion 6C (HID Form	•						
	16,16.3	19,24	11,11.3	15,16	11,13	8,13			
	13,15	13,15	20,22	10,12	11,12	12,14			
2	14,14.2	28,30	15,16	X	10,11	22,24			
	8,12	11,12	21,28.2	6,9	8,9	15,19			
LWNUKP	GlobalFiler ¹	™ (PDF Format)							
	16,16.3	19,24	11,11.3	15,16	11,13	8,13			
	13,15	13,15	20,22	10,12	11,12	12,14			
2	14,14.2	28,30	15,16	X,X	10,11	22,24			
	N/A	N/A	21,28.2	6,9	8,9	15,19			
	NSD	N/A	N/A	NSD					
N34BTG	GlobalFiler™	™ (HID Format)							
	16,16.3	19,24	11,11.3	15,16	11,13	8,13			
	13,15	13,15	20,22	10,12	11,12	12,14			
2	14,14.2	28,30	15,16	X,X	10,11	22,24			
	-	-	21,28.2	6,9	8,9	15,19			
	NM	-	-	NM					
NNJWPH	PowerPlex®	Fusion 6C (HID Form	nat)						
	16,16.3	19,24	11,11.3	15,16	11,13	8,13			
	13,15	13,15	20,22	10,12	11,12	12,14			
2	14,14.2	28,30	15,16	X	10,11	22,24			
	8,12	11,12	21,28.2	6,9	8,9	15,19			
NWHQ2H	GlobalFiler ¹	™ (FSA Format)							
	16,16.3	19,24	11,11.3	15,16	11,13	8,13			
	13,15	13,15	20,22	10,12	11,12	12,14			
2	14,14.2	28,30	15,16	X,X	10,11	22,24			
_	,	20,00	10,10	///	10,11	44,47			

WebCode		n Kits (File Format) D2S1338	D2S441	D251259	D50919	D7\$820
	D1S1656 D8S1179	D251338 D1051248 D21511	D25441 D125391	D3\$1358 D13\$317	D5S818 D16S539	D7S820 D18S51
tem	D19S433		D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 2 - STR	Results		
P9K89B	GlobalFiler	™, PowerPlex® Fusion	5C, PowerPlex® Fu	sion 6C (PDF Format)		
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	Χ	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19
QL6949	Dawar Dlay ®	Fusion 5C (FSA Form	o at)			
QL0949	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,13	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12	NT	6,9	8,9	15,19
	ND	NT	NT	NT	0,7	10,17
111/71/14/	GlobalFiler		* * *	* * *		
UKZM6X	GlobalFiler 16,16.3	™ (PDF Format) 19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
,	14,14.2	28,30	15,16		10,11	22,24
2	14,14.2	26,30	21,28.2	X,X 6,9	8,9	15,19
			21,20.2	0,7	0,7	13,17
V49CTF	PowerPlex®	Fusion 6C (HID Form	nat)			
_	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19
VU7RT9	GlobalFiler	™ (PDF Format)				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
			21,28.2	6,9	8,9	15,19
W6YVA8	PowerPlex®	Fusion 6C (PDF Forn	nat)			
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X	10,11	22,24
	8,12	11,12	21,28.2	6,9	8,9	15,19
WBP6K7	GlobalFilor	TM PowerPlay® Fusion	50 PowerPlay® F.	usion 6C (FSA Format)	(PDF Format)	
ייטו טוגי/	16,16.3	19,24	11,11.3	15,16	, (PDF Format) 11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X,X	10,11	22,24
<u>.</u>	8,12	11,12	21,28.2	6,9	8,9	15,19
	0,12	11,12	21,20.2	0,7	0,7	15,17

DNA Interpretation

ebCode		Kits (File Format) D2S1338	D05441	DOCTORO	DEC010	D70000
	D1\$1656 D8\$1179	D251338 D1051248	D2S441 D12S391	D3S1358 D13S317	D5S818 D16S539	D7S820 D18S51
em	D19\$433	D21S11	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 2 - STR	Results		
BXHF4	GlobalFiler [™]	™ (HID Format)				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
2	14,14.2	28,30	15,16	X	10,11	22,24
			21,28.2	6,9	8,9	15,19
	_			_		
HFNEW	PowerPlex®	Fusion 5C (FSA Form	nat)			
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12	not tested	6,9	8,9	15,19
	not detected	not tested	not tested	not tested		
VZW34	GlobalFiler™	M				
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
	14,14.2	28,30	15,16	X,X	10,11	22,24
			21,28.2	6,9	8,9	15,19
	NR			NR		

Amplification I D1S1656 D8S1179 D19S433	(its (File Format) D2S1338 D10S1248	D2S441	D2C1259	DEC010	D=0000
D8S1179		D23771	D3\$1358	D5\$818	D7\$820
		D12S391	D13S317	D16S539	D18S51
	D21511	D22S1045	Amelogenin	CSF1PO	FGA
Penta D	Penta E	SE33	TH01	TPOX	vWA
DYS391	DYS570	DYS576	Y Indel		
		ltem 3 - STR I	Results		
GlobalFiler™,	Investigator® 24p	olex, PowerPlex® Fusion	n 5C, PowerPlex® Fu	sion 6C (PDF Form	nat)
12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
14,14.2,15	28,30,32.2	11,15,16	Х	10,11,13	22,24
8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
- CL IF:L IM	-	-	-		
	16.18.19.24	11.11.3	15.16.17.18	10.11.13	8,10,11,13
					12,14,15,19
					22,24
14,14.2,15	20,00,02.2				15,18,19
	usion 6C (PDF Fo	rmat), (HID Format)			
12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
GlobalFiler™	(PDF Format)				
12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
		19,20,22		9,11,12	12,14,15,19
14,14.2,15	28,30,32.2	11,15,16	Χ	10,11,13	22,24
		15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
GlobalFiler™	(PDF Format)				
	,	11.11.3	15.16.17.18	10.11.13	8,10,11,13
					12,14,15,19
					22,24
17,17.2,10	20,00,02.2				15,18,19
	12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 GlobalFiler™ 2,13,15,16,16.3 12,13,14,15 14,14.2,15 PowerPlex® F 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 GlobalFiler™ 12,13,16,16.3 12,13,14,15	12,13,16,16.3 16,18,19,24 12,13,14,15 13,15,16 14,14.2,15 28,30,32.2 8,12 10,11,12 GlobalFiler™ 2,13,15,16,16.3 16,18,19,24 12,13,14,15 13,15,16 14,14.2,15 28,30,32.2 PowerPlex® Fusion 6C (PDF Fo 12,13,16,16.3 16,18,19,24 12,13,14,15 13,15,16 14,14.2,15 28,30,32.2 8,12 10,11,12 GlobalFiler™ (PDF Format) 12,13,16,16.3 16,18,19,24 12,13,14,15 13,15,16 14,14.2,15 28,30,32.2 GlobalFiler™ (PDF Format) 2,13,16,16.3 16,18,19,24 12,13,14,15 13,15,16 14,14.2,15 28,30,32.2	GlobalFiler™, Investigator® 24plex, PowerPlex® Fusion 12,13,16,16.3 16,18,19,24 11,11.3 12,13,14,15 13,15,16 19,20,22 14,14.2,15 28,30,32.2 11,15,16 8,12 10,11,12 15,21,27.2,28.2	12,13,16,16.3 16,18,19,24 11,11.3 15,16,17,18 12,13,14,15 13,15,16 19,20,22 9,10,12 14,14.2,15 28,30,32.2 11,15,16 X 8,12 10,11,12 15,21,27.2,28.2 6,9,9.3 GlobalFiler™ 2,13,15,16,16.3 16,18,19,24 11,11.3 15,16,17,18 12,13,14,15 13,15,16 19,20,22 9,10,12 14,14.2,15 28,30,32.2 11,15,16 X,X PowerPlex® Fusion 6C (PDF Format), (HID Format) 12,13,16,16.3 16,18,19,24 11,11.3 15,16,17,18 12,13,14,15 13,15,16 19,20,22 9,10,12 14,14.2,15 28,30,32.2 11,15,16 X,X 8,12 10,11,12 15,21,27.2,28.2 6,9,9.3 GlobalFiler™ (PDF Format) 12,13,16,16.3 16,18,19,24 11,11.3 15,16,17,18 12,13,14,15 13,15,16 19,20,22 9,10,12 14,14.2,15 28,30,32.2 11,15,16 X GlobalFiler™ (PDF Format) 12,13,14,15 13,15,16 19,20,22 9,10,12 14,14.2,15 28,30,32.2 11,15,16 X GlobalFiler™ (PDF Format) 2,13,15,16,16.3 16,18,19,24 11,11.3 15,16,17,18 12,13,14,15 13,15,16 19,20,22 9,10,12 14,14.2,15 28,30,32.2 11,15,16 X GlobalFiler™ (PDF Format) 2,13,14,15 13,15,16 19,20,22 9,10,12 14,14,2,15 28,30,32.2 11,15,16 X,X	GlobalFiler™, Investigator® 24plex, PowerPlex® Fusion 5C, PowerPlex® Fusion 6C (PDF Form 12,13,16,16.3 16,18,19,24 11,11.3 15,16,17,18 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X 10,11,13 8,12 10,11,12 15,21,27.2,28.2 6,9,9.3 8,9 GlobalFiler™ 2,13,15,16,16.3 16,18,19,24 11,11.3 15,16,17,18 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X,X 10,11,13 15,21,27.2,28.2 6,9,9.3 8,9 PowerPlex® Fusion 6C (PDF Format), (HID Format) 12,13,16,16.3 16,18,19,24 11,11.3 15,16,17,18 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X,X 10,11,13 8,12 10,11,12 15,21,27.2,28.2 6,9,9.3 8,9 GlobalFiler™ (PDF Format) GlobalFiler™ (PDF Format) 12,13,16,16.3 16,18,19,24 11,11.3 15,16,17,18 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X,X 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X,X 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X,X 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X,X 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X,X 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X,X 10,11,13 12,13,14,15 13,15,16 19,20,22 9,10,12 9,11,12 14,14.2,15 28,30,32.2 11,15,16 X,X 10,11,13

	D1S1656	n Kits (File Format) D2S1338	D2S441	D3S1358	D5\$818	D7\$820
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
em .	D19S433	D21S11	D22\$1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	∨WA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 3 - STR I	Results		
YKVQ	PowerPlex®	Fusion 5C (FSA For	mat)			
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
	8,12	10,11,12		6,9,9.3	8,9	15,18,19
	ND					
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
najor —	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12		6,9	8,9	15,19
	ND					
_	12,13	16,18	11,11	17,18	10,13	10,11
	12,14	13,16	19,Inc.	9,10	9,12	15,19
ninor	14,15	28,32.2	11,15	X,X	11,13	22,24
	12,12	10,Inc.		6,9.3	8,8	15,18
	ND					
GBJQY	GlobalFiler ¹	™ (PDF Format)				
	12,13,15,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
	14,14.2,15	28,30,32.2	11,15,16 15,21,27.2,28.2	X,X 6,9,9.3	10,11,13 8,9	22,24 15,18,19
i	14,14.2,15	28,30,32.2				
⊋78MN			15,21,27.2,28.2			
QZ8MN	И PowerPlex®	Fusion 5C (FSA For	15,21,27.2,28.2 mat)	6,9,9.3	8,9	15,18,19
QZ8MN	л PowerPlex® 12,13,16,16.3	Fusion 5C (FSA Form 16,18,19,24	15,21,27.2,28.2 mat)	6,9,9.3	10,11,13	15,18,19 8,10,11,13
QZ8MN	M PowerPlex® 12,13,16,16.3 12,13,14,15	Fusion 5C (FSA Form 16,18,19,24 13,15,16	15,21,27.2,28.2 mat) 11,11.3 19,20,22	6,9,9.3 15,16,17,18 9,10,12	8,9 10,11,13 9,11,12	8,10,11,13 12,14,15,19
QZ8MM	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2	15,21,27.2,28.2 mat)	6,9,9.3 15,16,17,18 9,10,12 X,X	8,9 10,11,13 9,11,12 10,11,13	15,18,19 8,10,11,13 12,14,15,19 22,24
QZ8MN	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12	Fusion 5C (FSA Form 16,18,19,24 13,15,16	15,21,27.2,28.2 mat) 11,11.3 19,20,22	6,9,9.3 15,16,17,18 9,10,12	8,9 10,11,13 9,11,12	8,10,11,13 12,14,15,19
QZ8MN	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3	8,9 10,11,13 9,11,12 10,11,13 8,9	15,18,19 8,10,11,13 12,14,15,19 22,24 15,18,19
QZ8MN	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3	8,9 10,11,13 9,11,12 10,11,13 8,9	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13
	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14
	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X	10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24
	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14
	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12 ND	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30 11,12	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22 15,16	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X 6,9	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11 8,9	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24 15,19
	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12 ND 12,13	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30 11,12 16,18	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22 15,16	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X 6,9 17,18	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11 8,9 10,13	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24 15,19
najor	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12 ND 12,13	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30 11,12 16,18 13,16	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22 15,16 11,INC 19,INC	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X 6,9 17,18 9,10	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11 8,9 10,13 9,12	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24 15,19
najor	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12 ND 12,13 12,14 15,INC	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30 11,12 16,18 13,16 32.2,INC	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22 15,16	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X 6,9 17,18 9,10 X,X	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11 8,9 10,13 9,12 11,13	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24 15,19 10,11 15,19 22,INC / 24,IN
najor	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12 ND 12,13	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30 11,12 16,18 13,16	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22 15,16 11,INC 19,INC	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X 6,9 17,18 9,10	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11 8,9 10,13 9,12	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24 15,19
najor	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12 ND 12,13 12,14 15,INC 12,INC ND	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30 11,12 16,18 13,16 32.2,INC 10,INC	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22 15,16 11,INC 19,INC 11,INC	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X 6,9 17,18 9,10 X,X	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11 8,9 10,13 9,12 11,13	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24 15,19 10,11 15,19 22,INC / 24,IN
QZ8MM najor ninor	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12 ND 12,13 12,14 15,INC 12,INC ND PowerPlex®	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30 11,12 16,18 13,16 32.2,INC 10,INC	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22 15,16 11,INC 19,INC 11,INC	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X 6,9 17,18 9,10 X,X 9.3,INC	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11 8,9 10,13 9,12 11,13 8,INC	15,18,19 8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24 15,19 10,11 15,19 22,INC / 24,IN 18,INC
najor	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12 ND 12,13 12,14 15,INC 12,INC ND PowerPlex® 12,13,16,16.3	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30 11,12 16,18 13,16 32.2,INC 10,INC Fusion 6C (HID Form 16,18,19,24	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22 15,16 11,INC 19,INC 11,INC 11,INC	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X 6,9 17,18 9,10 X,X 9.3,INC	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11 8,9 10,13 9,12 11,13 8,INC	8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24 15,19 10,11 15,19 22,INC / 24,IN 18,INC
najor	M PowerPlex® 12,13,16,16.3 12,13,14,15 14,14.2,15 8,12 ND 16,16.3 13,15 14,14.2 8,12 ND 12,13 12,14 15,INC 12,INC ND PowerPlex®	Fusion 5C (FSA Form 16,18,19,24 13,15,16 28,30,32.2 10,11,12 19,24 13,15 28,30 11,12 16,18 13,16 32.2,INC 10,INC	15,21,27.2,28.2 mat) 11,11.3 19,20,22 11,15,16 11,11.3 20,22 15,16 11,INC 19,INC 11,INC	6,9,9.3 15,16,17,18 9,10,12 X,X 6,9,9.3 15,16 10,12 X,X 6,9 17,18 9,10 X,X 9.3,INC	8,9 10,11,13 9,11,12 10,11,13 8,9 11,13 11,12 10,11 8,9 10,13 9,12 11,13 8,INC	15,18,19 8,10,11,13 12,14,15,19 22,24 15,18,19 8,13 12,14 22,24 15,19 10,11 15,19 22,INC / 24,IN 18,INC

WebCode		Kits (File Format)				
	D1S1656 D8S1179	D2S1338 D10S1248	D2S441 D12S391	D3\$1358 D13\$317	D5S818 D16S539	D7\$820 D18\$51
tem =	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
_	DYS391	DYS570	DYS576	Y Indel		
			Item 3 - STR	Results		
MZPCN	GlobalFiler"	™ (HID Format)				
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
	-	-	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
	-	-	-	-		
_	12,13	16,18	11,11	17,18	10,13	10,11
	12,14	13,16	19,20	9,10	9,12	15,19
Bmajor	14,15	28,32.2	11,15	X,X	11,13	22,24
	-	-	15,27.2	6,9.3	8,8	15,18
	-	-	<u>-</u>	<u>-</u>		
_	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
3minor	14,14.2	28,30	15,16	X,X	10,11	22,24
	-	-	21,28.2	6,9	8,9	15,19
	-	-	-	-		
FJVGLJ		, PowerPlex® Fusic	n 5C (FSA Format), (P	DF Format)		
_	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
_	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
	8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
Y8V3G	PoworPlay®	Fusion 5C (PDF Fo	rmat)			
1000	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
	8,12	10,11,12	11,13,10	6,9,9.3	8,9	15,18,19
	ND	/ / . =		-7.7	-,,	/ / . ,
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
major	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12		6,9	8,9	15,19
	ND					
	12,13	16,18	11,11	17,18	10,13	10,11
	12,14	13,16	19,20	9,10	9,12	15,19
	12,14					
minor	14,15	28,32.2	11,15	X,X	11,13	22,24
minor			11,15	X,X 6,9.3	11,13 8,8	22,24 15,18

WebCode		Kits (File Format) D2S1338	D2S441	D3S1358	D5\$818	D7S820
	D1S1656 D8S1179	D251338 D1051248	D25441 D125391	D13S317	D16S539	D75820 D18S51
tem	D19\$433	D21S11 Penta E	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D		SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			Item 3 - STR	Results		
G3QA7G	PowerPlex® F	usion 5C (FSA Forr	mat)			
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
	8,12	10,11,12	not tested	6,9,9.3	8,9	15,18,19
	ND	not tested	not tested	not tested		
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
Bmajor	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12		6,9	8,9	15,19
	ND					
_	12,13	16,18	11,11	17,18	10,13	10,11
	12,14	13,16	19,inc	9,10	9,12	15,19
minor	15,inc	32.2,inc	11,inc	X,X	11,13	22,inc 24,inc
	12,12	10,inc		9.3,inc	8,inc	18,inc
	ND					
GXRVJR	GlobalFiler™	, Investigator® 24pl	ex, PowerPlex® Fusion	n 5C, PowerPlex® Fus	sion 6C (PDF Form	iat), (HID Format
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
	8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
GZZ8ZT	GlobalFiler™ (HID Format)	, Investigator® 24pl	ex, PowerPlex® Fusion	n 5C, PowerPlex® Fu	sion 6C (FSA Form	at), (PDF Format
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
3	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
	8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
HBZXJF	GlobalFiler™	(HID Format)				
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
	.,=,5		15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
	NM			NM	,	, , ,

WebCode	e Amplification D1S1656	Kits (File Format) D2\$1338	D2S441	D3S1358	D5\$818	D7\$820
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
tem	D19\$433	D21S11	D22\$1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 3 - STR I	Results		
IJ738P	GlobalFiler™	M (PDF Format)				
	12,13,16,16.3	16,18,(19),24	11,(11.3)	15,16,17,18	10,(11),13	8,10,11,13
	12,13,14,15	13,(15),(16)	19,20,(22)	9,10,(12)	9,11,12	12,14,15,19
	14,(14.2),15	28,(30),32.2	11,15,(16)	X,X	(10),11,13	22,24
			15,21,27.2,28.2	6,(9),9.3	8,(9)	15,(18),(19)
	NR			NR		
	12,13	16,18	11,11	17,18	10,13	10,11
	12,14	13,16	19,20	9,10	9,12	15,19
major	14,15	28,32.2	11,15	X,X	11,13	22,24
			15,27.2	6,9.3	8,8	15,18
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
minor	14,14.2	28,30	15,16	X,X	10,11	22,24
	A ID		21,28.2	6,9	8,9	15,19
	NR			NR		
LR7H9	GlobalFiler™	М				
_	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
_	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
			15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
	NR			NR		
6XYXF	GlobalFiler™	M (PDF Format)				
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
			15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
(BP98D	PowerPlex®	Fusion 5C (FSA Form	nat)			
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	Х	10,11,13	22,24
	8,12	10,11,12		6,9,9.3	8,9	15,18,19
	ND					
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
major _	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12		6,9	8,9	15,19
	ND					
	12,13	16,18	11,11	17,18	10,13	10,11
	12,14	16,inc.	19,inc.	9,10	9,12	15,19
		00.0.	11.	V V	11 12	00: /04:
minor	15,inc. 12,12	32.2,inc. 10,inc.	11,inc.	X,X 9.3,inc.	11,13 8,inc.	22,inc./24,inc. 18,inc.

WebCod	e Amplification D1\$1656	Kits (File Format) D2S1338	D2S441	D3S1358	D5\$818	D7S820
1	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
tem '	D19S433	D21511	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 3 - STR i	Results		
NVYAL	GlobalFiler™	' (PDF Format)				
	12,13,15,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
			15,21,27.2,29.2	6,9,9.3	8,9	15,18,19
.48ZJG	GlobalFiler™	' (PDF Format), (HII	D Format)			
	12,13,16,16.3	16,18,19,24	, 11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
			15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
חדמרה	- CL IT:1 TM	1 DDI ⊚ Γ :	- FC D DI @ F	- 4C /EC^ F	/DDE E / / //)
RT3ED			n 5C, PowerPlex® Fusi	,	, , ,	•
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15 8,12	28,30,32.2 10,11,12	11,15,16 15,21,27.2,28.2	X 6,9,9.3	10,11,13 8,9	22,24 15,18,19
	57.2	. 57 7. 2		3,7,7.3	3,,	10/10/17
.VQJQ8		Fusion 6C (HID Fo	•			
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
	8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
WNUKP	GlobalFiler™	' (PDF Format)				
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
- 1	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	Χ	10,11,13	22,24
	N/A	N/A	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
	NSD	N/A	N/A	NSD		
	NJD		14/7			
N34BTG			14//	<u> </u>		
N34BTG			11,11.3	15,16,17,18	10,11,13	8,10,11,13
N34BTG	GlobalFiler™	' (HID Format)			10,11,13 9,11,12	8,10,11,13 12,14,15,19
	GlobalFiler™ 12,13,16,16.3	(HID Format) 16,18,19,24	11,11.3	15,16,17,18		
	GlobalFiler™ 12,13,16,16.3 12,13,14,15	(HID Format) 16,18,19,24 13,15,16	11,11.3 19,20,22	15,16,17,18 9,10,12	9,11,12	12,14,15,19
	GlobalFiler™ 12,13,16,16.3 12,13,14,15	(HID Format) 16,18,19,24 13,15,16	11,11.3 19,20,22 11,15,16	15,16,17,18 9,10,12 X,X	9,11,12 10,11,13	12,14,15,19 22,24
	GlobalFiler™ 12,13,16,16.3 12,13,14,15 14,14.2,15 - NM	(HID Format) 16,18,19,24 13,15,16	11,11.3 19,20,22 11,15,16 15,21,27.2,28.2	15,16,17,18 9,10,12 X,X 6,9,9.3	9,11,12 10,11,13	12,14,15,19 22,24
	GlobalFiler™ 12,13,16,16.3 12,13,14,15 14,14.2,15 - NM	(HID Format) 16,18,19,24 13,15,16 28,30,32.2 -	11,11.3 19,20,22 11,15,16 15,21,27.2,28.2	15,16,17,18 9,10,12 X,X 6,9,9.3	9,11,12 10,11,13	12,14,15,19 22,24
	GlobalFiler™ 12,13,16,16.3 12,13,14,15 14,14.2,15 - NM PowerPlex®	(HID Format) 16,18,19,24 13,15,16 28,30,32.2 - - Fusion 6C (HID Fo	11,11.3 19,20,22 11,15,16 15,21,27.2,28.2 -	15,16,17,18 9,10,12 X,X 6,9,9.3 NM	9,11,12 10,11,13 8,9	12,14,15,19 22,24 15,18,19
N34BTG	GlobalFiler™ 12,13,16,16.3 12,13,14,15 14,14.2,15 - NM H PowerPlex® 12,13,16,16.3	(HID Format) 16,18,19,24 13,15,16 28,30,32.2 - - - Fusion 6C (HID Formation 16,18,19,24	11,11.3 19,20,22 11,15,16 15,21,27.2,28.2 - rmat)	15,16,17,18 9,10,12 X,X 6,9,9.3 NM	9,11,12 10,11,13 8,9 10,11,13	12,14,15,19 22,24 15,18,19 8,10,11,13

WebCode		Kits (File Format)	Decade	D261050	DECOM	D76000
	D1S1656 D8S1179	D2S1338 D10S1248	D2S441 D12S391	D3S1358 D13S317	D5S818 D16S539	D7S820 D18S51
■ em	D19\$433	D21S11	D22\$1045	Amelogenin	CSF1PO	FGA
•	Penta D	Penta E	SE33	TH01	TPOX	vWA
_	DYS391	DYS570	DYS576	Y Indel		
			Item 3 - STR I	Results		
IWHQ2F	H GlobalFiler™	(FSA Format)				
	12,13,15,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
			15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
9K89B	GlobalFiler™	, PowerPlex® Fusion	n 5C, PowerPlex® Fus	ion 6C (PDF Format)		
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	Х	10,11,13	22,24
	8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
QL6949	PowerPlex® I	Fusion 5C (FSA For	mat)			
_	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X	10,11,13	22,24
	8,12	10,11,12	NT	6,9,9.3	8,9	15,18,19
	ND	NT	NT	NT		
_	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
major	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12	NT	6,9	8,9	15,19
	ND	NT	NT	NT		
	12,13	16,18	11,11	17,18	10,INC	10,11
	12,14	16,INC	19,INC	9,INC	9,INC	15,19
minor	15,INC	32.2,INC	11,INC	X,X	11,13	22,24
	12,12 ND	10,INC NT	NT NT	9.3,INC NT	8,8	18,INC
11/71/1/1/				INI		
JKZM6X	GlobalFiler™	,,,,	·	15 1/ 17 10	10 11 10	0 10 11 10
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
			15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
49CTF	PowerPlex® I	Fusion 6C (HID For	mat)			
_	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
	14,14.2,15	28,30,32.2	11,15,16	Х	10,11,13	22,24
	8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19

DNA Inte	rpretation					Test 19-5
WebCod		Kits (File Format)	DOC 441	D251250	DEC010	D75000
	D1S1656 D8S1179	D2S1338 D10S1248	D2S441 D12S391	D3\$1358 D13\$317	D5S818 D16S539	D7S820 D18S51
ltem	D19\$433	D21S11	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			Item 3 - STR	Results		
VU7RT9	GlobalFiler™	M (PDF Format)				
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
3	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
			15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
W6YVA8	B PowerPlex®	Fusion 6C (PDF Fo	rmat)			
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
3	14,14.2,15	28,30,32.2	11,15,16	Χ	10,11,13	22,24
	8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
WBP6K7			n 5C, PowerPlex® Fus	,	,	
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
3	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
	8,12	10,11,12	15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
ZBXHF4	GlobalFiler™	M (HID Format)				
_	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
3	14,14.2,15	28,30,32.2	11,15,16	Χ	10,11,13	22,24
			15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
	12,13	16,18	11	17,18	10,13	10,11
	12,14	13,16	19,20	9,10	9,12	15,19
3major	14,15	28,32.2	11,15	Χ	11,13	22,24
			15,27.2	6,9.3	8	15,18
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
3minor	14,14.2	28,30	15,16	Х	10,11	22,24
						15.10
			21,28.2	6,9	8,9	15,19

WebCode		n Kits (File Format)				
_	D1\$1656	D2S1338	D2S441	D3\$1358	D5\$818	D7S820
. •	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
Item	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO	FGA
-	Penta D DYS391	Penta E DYS570	SE33 DYS576	TH01 Y Indel	TPOX	vWA
	D13341	D15570				
			Item 3 - STR I	Kesults		
ZHFNEW	PowerPlex®	Fusion 5C (FSA Form	nat)			
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
3	14,14.2,15	28,30,32.2	11,15,16	Χ	10,11,13	22,24
	8,12	10,11,12	not tested	6,9,9.3	8,9	15,18,19
	not detected	not tested	not tested	not tested		
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
3major	14,14.2	28,30	15,16	X,X	10,11	22,24
	8,12	11,12	not applicable	6,9	8,9	15,19
	not detected	not applicable	not applicable	not applicable		
	12,13	16,18	11,11	17,18	10,13	10,11
	12,14	13,16	19,inconclusive	9,10	9,12	15,19
3minor	14,15	28,32.2	11,15	X,X	11,13	22,24/22,22/24,24
	12,12	10,inconclusive	not applicable	6,9.3	8,inconclusive	15,18
	not detected	not applicable	not applicable	not applicable		
ZVZW34	GlobalFiler	TM				
	12,13,16,16.3	16,18,19,24	11,11.3	15,16,17,18	10,11,13	8,10,11,13
	12,13,14,15	13,15,16	19,20,22	9,10,12	9,11,12	12,14,15,19
3	14,14.2,15	28,30,32.2	11,15,16	X,X	10,11,13	22,24
			15,21,27.2,28.2	6,9,9.3	8,9	15,18,19
	NR			NR		

WebCod	e Amplification D1S1656	Kits (File Format D2S1338) D2S441	D3S1358	D5S818	D7\$820
	D8S1179	D10S1248	D125391	D13S317	D16S539	D18S51
tem "	D19\$433	D21S11	D22\$1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DY\$391	DYS570	DY\$576	Y Indel		
			Item 4 - STR Ro	esults		
29L4L4	GlobalFiler™	, Investigator® 24	plex, PowerPlex® Fusion	5C, PowerPlex® Fu	sion 6C (PDF For	mat)
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17	2		
2X3NH2	GlobalFiler™					
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	10,11,11.2,10	20,27,00,02.2	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	10,11		, , , , , , , , , , , , , , , , , , , ,	7 7 7 7	, , ,	, , , .
3GXG4Y		t), (HID Format)				
JOAO41	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
ı	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	18,22,23,24,26,30
	11	20	17	0,0,7,7.0	0,7,10,11	13,10,10,17
41,100,00			.,			
4N93P9	GlobalFiler™	,	11 11 0 10	15.17	11.10	0.0.11.10
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	10.11		16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	10,11			2		
733884		(PDF Format)				
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
ـ ـ	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,26,30
			16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	10,11			2		
AFYKVQ	PowerPlex® F	usion 5C (FSA Fo	ormat)			
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
1	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	22,23,24,26,30
	6,8,11,12,13	7,11,12,13		6,8,9,9.3	8,9,10,11	15,16,18,19
	11					
AGBJQY	GlobalFiler™	(PDF Format)				
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
			16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	10,11			2		

WebCode		Kits (File Format		Doggan	D.C.C.C.	D. C.
	D1\$1656 D8\$1179	D2S1338 D10S1248	D2S441 D12S391	D3S1358 D13S317	D5S818 D16S539	D7\$820 D18\$51
tem	D19\$433	D21511	D123391	Amelogenin	CSF1PO	FGA
l l	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 4 - STR R			
AQZ8MN	∧ PowerPlex®	Fusion 5C (FSA Fo				
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	22,23,24,26,30
	6,8,11,12,13	7,11,12,13		6,8,9,9.3	8,9,10,11	15,16,18,19
	11					
C72T4E	PowerPlex®	Fusion 6C (HID Fo	ormat)			
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
1	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17			
MZPCN	GlobalFiler™	M (HID Format)				
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	-	-	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	-	-	2		
JVGLJ	GlobalFiler [™]	, PowerPlex® Fusi	on 5C (FSA Format), (PD	F Format)		
_	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
-	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11			2		
Y8V3G	PowerPlex®	Fusion 5C (PDF Fo	ormat)			
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
-	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	22,23,24,26,30
	6,8,11,12,13	7,11,12,13		6,8,9,9.3	8,9,10,11	15,16,18,19
	11					
G3QA76	PowerPlex®	Fusion 5C (FSA Fo	ormat)			
_	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	22,23,24,26,30
	6,8,11,12,13	7,11,12,13	not tested	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	not tested	not tested	not tested		

	le Amplification D1S1656	Kits (File Format) D2S1338	D2S441	D3S1358	D5S818	D7S820
	DIS1050 D8S1179	D251338 D1051248	D125441 D125391	D13S317	D16S539	D78820 D18851
ltem	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	ТРОХ	vWA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 4 - STR Re	esults		
GXRVJR	GlobalFiler™	'. Investigator® 24r	olex, PowerPlex® Fusion		usion 6C. (PDF For	mat). (HID Format)
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
4	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17	2	3,7,13,11	10,10,10,17
	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A
4major	N/A	N/A	N/A	X,X	N/A	N/A
rinajoi	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	IN/A	14//
	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A
1minor	N/A	N/A	N/A	X,Y	N/A	N/A
+11111101	IN/A	IV/A	N/A	N/A	N/A	N/A
	N/A		IVA	N/A	IV/A	IVΑ
GZZ8ZT	(HID Format		olex, PowerPlex® Fusion :		·	
GZZ8ZT	(HID Format) 15,16,16.3 10,11,12,13,15	19,20,21,23,24 13,14,15	11,11.3,13 15,20,21,22,23	15,16 9,10,12	11,13 9,11,12,13	8,9,11,13 12,13,14,15,16
	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15	19,20,21,23,24 13,14,15 28,29,30,32.2	11,11.3,13 15,20,21,22,23 15,16	15,16 9,10,12 X,Y	11,13 9,11,12,13 9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30
	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2	15,16 9,10,12 X,Y 6,8,9,9.3	11,13 9,11,12,13	8,9,11,13 12,13,14,15,16
1 1	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20	11,11.3,13 15,20,21,22,23 15,16	15,16 9,10,12 X,Y	11,13 9,11,12,13 9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30
1 1	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format)	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17	15,16 9,10,12 X,Y 6,8,9,9.3 2	9,11,12,13 9,10,11 8,9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19
4	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler 15,16,16.3	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17	15,16 9,10,12 X,Y 6,8,9,9.3 2	11,13 9,11,12,13 9,10,11 8,9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13
4	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format)	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17	15,16 9,10,12 X,Y 6,8,9,9.3 2	9,11,12,13 9,10,11 8,9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19
4 HBZXJF	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler 15,16,16.3	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30
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4 HBZXJF 4 HJ738P	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler ^{TA} 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 GlobalFiler ^{TA}	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24 13,14,15 28,29,30,32.2	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y 6,8,9,9.3 2	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19
HBZXJF HJ738P	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 GlobalFiler™ (15),16,16.3	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24 13,14,15 28,29,30,32.2	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y 6,8,9,9.3 2	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,(9),(11),(13) 12,(13),14,(15),(16 (18),22,(23),24,(26) 30)
HBZXJF	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 GlobalFiler™ (15),16,16.3 (10),(11),(12),13,15	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24 13,14,15 28,29,30,32.2	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 11,11.3,(13) (15),20,(21),22,(23) 15,16 16,18,(19),21,(25.2),2	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 (9),10,12	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,(9),(11),(13) 12,(13),14,(15),(16 (18),22,(23),24,(26)
HBZXJF	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 GlobalFiler™ (15),16,16.3 (10),(11),(12),13,15	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24 13,14,15 28,29,30,32.2	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 11,11.3,(13) (15),20,(21),22,(23) 15,16	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 (9),10,12 X,(Y)	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 (9),11,12,(13) (9),10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,(9),(11),(13) 12,(13),14,(15),(16 (18),22,(23),24,(26) 30)
HBZXJF HJ738P	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 GlobalFiler™ (15),16,16.3 (10),(11),(12),13,15 13,14,14.2,(15)	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24 13,14,15 28,29,30,32.2 (PDF Format) 19,(20),(21),(23),24 13,14,15 28,(29),30,32.2	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 11,11.3,(13) (15),20,(21),22,(23) 15,16 16,18,(19),21,(25.2),2	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 (9),10,12 X,(Y) 6,(8),9,(9.3)	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 (9),11,12,(13) (9),10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,(9),(11),(13) 12,(13),14,(15),(16 (18),22,(23),24,(26) 30)
HBZXJF HJ738P	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 GlobalFiler™ (15),16,16.3 (10),(11),(12),13,15 13,14,14.2,(15)	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24 13,14,15 28,29,30,32.2 (PDF Format) 19,(20),(21),(23),24 13,14,15 28,(29),30,32.2	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 11,11.3,(13) (15),20,(21),22,(23) 15,16 16,18,(19),21,(25.2),2 8.2	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 (9),10,12 X,(Y) 6,(8),9,(9.3)	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 (9),11,12,(13) (9),10,11 8,(9),(10),(11)	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,(9),(11),(13) 12,(13),14,(15),(16 (18),22,(23),24,(26) 30) 15,16,(18),19
HBZXJF HJ738P	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 GlobalFiler™ (15),16,16.3 (10),(11),(12),13,15 13,14,14.2,(15) 11 GlobalFiler™ 15,16,16.3	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24 13,14,15 28,29,30,32.2 (PDF Format) 19,(20),(21),(23),24 13,14,15 28,(29),30,32.2	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 11,11.3,(13) (15),20,(21),22,(23) 15,16 16,18,(19),21,(25.2),2 8.2	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 (9),10,12 X,(Y) 6,(8),9,(9.3) 2	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 (9),11,12,(13) (9),10,11 8,(9),(10),(11)	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,(9),(11),(13) 12,(13),14,(15),(16 (18),22,(23),24,(26) 30) 15,16,(18),19
JLR7H9	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 GlobalFiler™ (15),16,16.3 (10),(11),(12),13,15 13,14,14.2,(15) 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24 13,14,15 28,29,30,32.2 (PDF Format) 19,(20),(21),(23),24 13,14,15 28,(29),30,32.2	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 11,11.3,(13) (15),20,(21),22,(23) 15,16 16,18,(19),21,(25.2),2 8.2 11,11.3,13 15,20,21,22,23	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 (9),10,12 X,(Y) 6,(8),9,(9.3) 2	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 (9),11,12,(13) (9),10,11 8,(9),(10),(11)	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,(9),(11),(13) 12,(13),14,(15),(16 (18),22,(23),24,(26) 30) 15,16,(18),19 8,9,11,13 12,13,14,15,16
4 HBZXJF 4 HJ738P	(HID Format) 15,16,16.3 10,11,12,13,15 13,14,14.2,15 6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 GlobalFiler™ (15),16,16.3 (10),(11),(12),13,15 13,14,14.2,(15) 11 GlobalFiler™ 15,16,16.3	19,20,21,23,24 13,14,15 28,29,30,32.2 7,11,12,13 20 (HID Format) 19,20,21,23,24 13,14,15 28,29,30,32.2 (PDF Format) 19,(20),(21),(23),24 13,14,15 28,(29),30,32.2	11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 17 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 11,11.3,(13) (15),20,(21),22,(23) 15,16 16,18,(19),21,(25.2),2 8.2	15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 (9),10,12 X,(Y) 6,(8),9,(9.3) 2	11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 (9),11,12,(13) (9),10,11 8,(9),(10),(11)	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,(9),(11),(13) 12,(13),14,(15),(16) (18),22,(23),24,(26) 30) 15,16,(18),19

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<6XYXF	GlobalFiler™	(PDF Format)	nom i oncio	030113		
NON I NI	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	10,14,14.2,13	20,27,00,02.2	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
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(BP98D	PowerPlex® F	usion 5C (FSA Fo	ormat)			
,	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	22,23,24,26,30
	6,8,11,12,13	7,11,12,13	,	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	, , ,		, , ,	, , ,	
KNVYAL	GlobalFiler™					
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
			16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	10,11			2		
L48ZJG	GlobalFiler™	(PDF Format), (H	ID Format)			
_	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
-	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
_	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
			16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11			2		
RT3ED	GlobalFiler™,	, PowerPlex® Fusi	on 5C, PowerPlex® Fusio	n 6C (FSA Format)	, (PDF Format), (H	ID Format)
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
-	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
Ļ	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17	2		
.VQJQ8	PowerPlex® F	usion 6C (HID Fo	ormat)			
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
-	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17			
.WNUKP	GlobalFiler™	(PDF Format)				
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	INC
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	N/A	N/A	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	N/A	N/A	2		

WebCod		Kits (File Format				
	D1\$1656	D2S1338	D2\$441	D3S1358	D5\$818	D7\$820
tom.	D8S1179 D19S433	D10S1248	D125391 D22S1045	D13S317 Amelogenin	D16S539 CSF1PO	D18S51 FGA
tem 	Penta D	D21S11 Penta E	SE33	TH01	TPOX	vWA
	DYS391	DYS570	DY\$576	Y Indel		
			ltem 4 - STR Re			
N34BTG	GlobalFiler™	(HID Format)	IICIII 4 - OTK K	230113		
104010	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	-	-	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	-	-	2	3,7,13,11	10,10,10,17
NNJWPH	I PowerPlay® F	usion 6C (HID Fo	ormat)			
11177111	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17	3,3,7,7.3	3,,,,.	. 5/. 5/. 5/. /
IWHQ2	H GlobalFiler™	(FSA Format)				
NVIIQZ	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	13,14,14.2,13	20,27,30,32.2	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	10,11		10,10,17,21,20.2,20.2	2	0,7,10,11	13,10,10,17
9K89B	GlobalFiler™	PowerPlex® Fusi	on 5C, PowerPlex® Fusio	n 6C (PDF Format)		
,,	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17	2	, , ,	, , ,
QL6949	PowerPlex® F	usion 5C (FSA Fo	ormat)			
,	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13.14.14.2.15	28.29.30.32.2	15.16		9.10.11	18.22.23.24.26.30
	13,14,14.2,15 6,8,11,12,13	28,29,30,32.2 7,11,12,13	15,16 NT	X,Y	9,10,11 8,9,10,11	18,22,23,24,26,30 15,16,18,19
	13,14,14.2,15 6,8,11,12,13 11	28,29,30,32.2 7,11,12,13 NT	15,16 NT NT		9,10,11 8,9,10,11	18,22,23,24,26,30 15,16,18,19
IK7M6X	6,8,11,12,13	7,11,12,13 NT	NT NT	X,Y 6,8,9,9.3		
	6,8,11,12,13 11 GlobalFiler™	7,11,12,13 NT (PDF Format), (H	NT NT ID Format)	X,Y 6,8,9,9.3 NT	8,9,10,11	15,16,18,19
	6,8,11,12,13 11 GlobalFiler™ 15,16,16.3	7,11,12,13 NT (PDF Format), (H	NT NT ID Format) 11,11.3,13	X,Y 6,8,9,9.3 NT 15,16	8,9,10,11 11,13	15,16,18,19 8,9,11,13
JKZM6X	6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15	7,11,12,13 NT (PDF Format), (H 19,20,21,23,24 13,14,15	NT NT ID Format) 11,11.3,13 15,20,21,22,23	X,Y 6,8,9,9.3 NT 15,16 9,10,12	8,9,10,11 11,13 9,11,12,13	8,9,11,13 12,13,14,15,16
JKZM6X	6,8,11,12,13 11 GlobalFiler™ 15,16,16.3	7,11,12,13 NT (PDF Format), (H	NT NT ID Format) 11,11.3,13 15,20,21,22,23 15,16	X,Y 6,8,9,9.3 NT 15,16 9,10,12 X,Y	8,9,10,11 11,13 9,11,12,13 9,10,11	15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30
JKZM6X	6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15	7,11,12,13 NT (PDF Format), (H 19,20,21,23,24 13,14,15	NT NT ID Format) 11,11.3,13 15,20,21,22,23	X,Y 6,8,9,9.3 NT 15,16 9,10,12 X,Y 6,8,9,9.3	8,9,10,11 11,13 9,11,12,13	15,16,18,19 8,9,11,13 12,13,14,15,16
	6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15	7,11,12,13 NT (PDF Format), (H 19,20,21,23,24 13,14,15 28,29,30,32.2	NT NT ID Format) 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2	X,Y 6,8,9,9.3 NT 15,16 9,10,12 X,Y	8,9,10,11 11,13 9,11,12,13 9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30
JKZM6X	6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 PowerPlex® F	7,11,12,13 NT (PDF Format), (H 19,20,21,23,24 13,14,15 28,29,30,32.2	NT NT ID Format) 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2	X,Y 6,8,9,9.3 NT 15,16 9,10,12 X,Y 6,8,9,9.3	8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19
JKZM6X	6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 PowerPlex® F 15,16,16.3	7,11,12,13 NT (PDF Format), (H 19,20,21,23,24 13,14,15 28,29,30,32.2 Fusion 6C (HID Format)	NT NT ID Format) 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 ormat)	X,Y 6,8,9,9.3 NT 15,16 9,10,12 X,Y 6,8,9,9.3 2	8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13
JKZM6X	6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 PowerPlex® F 15,16,16.3 10,11,12,13,15	7,11,12,13 NT (PDF Format), (H 19,20,21,23,24 13,14,15 28,29,30,32.2 Fusion 6C (HID Fo 19,20,21,23,24 13,14,15	NT NT ID Format) 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 ormat) 11,11.3,13 15,20,21,22,23	X,Y 6,8,9,9.3 NT 15,16 9,10,12 X,Y 6,8,9,9.3 2 15,16 9,10,12	8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11 11,13 9,11,12,13	8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13 12,13,14,15,16
JKZM6X /49CTF	6,8,11,12,13 11 GlobalFiler™ 15,16,16.3 10,11,12,13,15 13,14,14.2,15 11 PowerPlex® F 15,16,16.3	7,11,12,13 NT (PDF Format), (H 19,20,21,23,24 13,14,15 28,29,30,32.2 Fusion 6C (HID Format)	NT NT ID Format) 11,11.3,13 15,20,21,22,23 15,16 16,18,19,21,25.2,28.2 ormat)	X,Y 6,8,9,9.3 NT 15,16 9,10,12 X,Y 6,8,9,9.3 2	8,9,10,11 11,13 9,11,12,13 9,10,11 8,9,10,11	15,16,18,19 8,9,11,13 12,13,14,15,16 18,22,23,24,26,30 15,16,18,19 8,9,11,13

DNA Inter						Test 19-589
WebCode	 Amplification D1S1656 	n Kits (File Format) D2S1338	D2S441	D3S1358	D5S818	D7S820
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
Item	D19S433	D21511	D22S1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	vWA
	DYS391	DY\$570	DYS576	Y Indel		
			Item 4 - STR Re	esults		
VU7RT9	GlobalFiler ¹	™ (PDF Format)				
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
4	13,14,14.2,15	28,29,30,32.2	15,16		9,10,11	18,22,23,24,26,30
			16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11			2		
W6YVA8	PowerPlex®	Fusion 6C (PDF Fo	rmat)			
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17			
WBP6K7	GlobalFiler ¹	™, PowerPlex® Fusic	on 5C, PowerPlex® Fusio	n 6C (FSA Format)	, (PDF Format)	
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	6,8,11,12,13	7,11,12,13	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	20	17	2		
ZBXHF4	GlobalFiler ¹	™ (HID Format)				
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
1	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
	10,11,11.2,10	20,27,00,02.2	16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11		,, . , , , ,	2	-,,,,-,,	/ / /
	16,16.3	19,24	11,11.3	15,16	11,13	8,13
	13,15	13,15	20,22	10,12	11,12	12,14
lmajor	14,14.2	28,30	15,16	Χ	10,11	22,24
			21,28.2	6,9	8,9	15,19
				<u> </u>		
_	15,16,16.3	19,20,21,23	11,11.3,13	15,16	11,13	8,9,11
	10,11,12,13	13,14,15	15,21,22,23	9,10,12	9,11,12,13	12,13,15,16
lminor	13,14,15	29,30,32.2	15,16	X,Y	9,10,11	18,23,26,30
			16,18,19,25.2	8,9,9.3	8,10,11	16,18
	11			2		
ZHFNEW	PowerPlex®	Fusion 5C (FSA Fo	rmat)			
_	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
4	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	22,23,24,26,30
	6,8,11,12,13	7,11,12,13	not tested	6,8,9,9.3	8,9,10,11	15,16,18,19
	11	not tested	not tested	not tested		

WebCode	Amplification	Kits (File Format				
	D1S1656	D2S1338	D2S441	D3S1358	D5\$818	D7S820
	D8S1179	D10S1248	D12S391	D13S317	D16S539	D18S51
tem	D19\$433	D21S11	D22\$1045	Amelogenin	CSF1PO	FGA
	Penta D	Penta E	SE33	TH01	TPOX	∨WA
	DYS391	DYS570	DYS576	Y Indel		
			ltem 4 - STR R	esults		
ZVZW34	GlobalFiler™					
	15,16,16.3	19,20,21,23,24	11,11.3,13	15,16	11,13	8,9,11,13
	10,11,12,13,15	13,14,15	15,20,21,22,23	9,10,12	9,11,12,13	12,13,14,15,16
	13,14,14.2,15	28,29,30,32.2	15,16	X,Y	9,10,11	18,22,23,24,26,30
			16,18,19,21,25.2,28.2	6,8,9,9.3	8,9,10,11	15,16,18,19
	11			2		

YSTR Results

WebCode	Amplification K			DVC000 H	DVCCCC	DVCOOL	DVCACA	DVCCCC
	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
ltem	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4		
			ltem 1 ·	- YSTR Resul	ts			
29L4L4	Yfiler®, PowerPlex	•	•					
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
3GXG4Y	PowerPlex® Y23 (F	SA Format), (F	PDF Format)					
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
4N93P9	Yfiler® (PDF Formo	at)						
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17		
				21		11		
733884	Yfiler®							
, 5555 .	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17		
				21		11		
AFYKVQ	PowerPlex® Y23 (F	SA Format)						
	16	12,12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
AGBJQY	Yfiler® (PDF Forma	at)						
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17		
				21		11		
EMZPCN	Yfiler® (FSA Formo	1†)						
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17		
	-	-	-	21	-	11		
FJVGLJ	Yfiler®, PowerPlex		ormat) (PDF Fa					
134013	16	123 (13/11)	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
·	9	17	17	21	12	11		
GXRVJR	Yfiler®, PowerPlex				. –	• •		
OVIVAIL	ffiler®, PowerPlex	123 (PDF F0 12	ormat), (HID FO 14	ormat) 29	25	9	11	14
_	15	10	11	29	13	17	21	12
1				/	10	1/	/	12

TABLE 3

WebCode	Amplification K							
	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
ltem	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
	DY\$549	DYS570	DYS576	DYS635	DYS643	Y GATA H4		
			Item 1	- YSTR Resul	ts			
GZZ8ZT	Yfiler®, PowerPlex	® Y23 (FSA Fo	ormat), (PDF Fo	ormat), (HID Fo	ormat)			
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
HBZXJF	Yfiler® (FSA Formo	1†)						
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17		
				21		11		
KNVYAL								
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
L48ZJG	PowerPlex® Y23 (F	DF Format), (HID Format)					
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
LRT3ED	Yfiler®, PowerPlex	® Y23 (FSA Fo	ormat), (PDF Fo	ormat), (HID Fo	ormat)			
	, 16	12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
LVQJQ8	Yfiler® (PDF Formo	nt)						
2, 0000	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17		
				21		11		
LWNUKP	Yfiler® (PDF Forma	11)						
LVIIVOI	16	12,12	14	29	25	9	11	14
1	15	10	11	21	13	17	N/A	N/A
	N/A	N/A	N/A	21	N/A	11	,	,
N34BTG	Yfiler® (FSA Formo							
טוטדטי ו	110 13A TOTTIC	12	14	29	25	9	11	14
1	15	10	11	21	13	17		
·	-	-	-	21	-	11		
NNJWPH	PowerPlex® Y23 (H			<u>-</u> ·		• •		
IAIATAALU	PowerPlex® 123 (F	רסוד (Format 12	14	29	25	9	11	14
1	15	10	11	29	13	17	21	12
ı	9	17					Z 1	12
	У	17	17	21	12	11		

TABLE 3

WebCode	Amplification K	its (File Fo	rmat)					
	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
ltem	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4		
			Item 1	- YSTR Resul	ts			
NWHQ2H	Yfiler® (PDF Formo	at)						
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17		
				21		11		
P9K89B	Yfiler®, PowerPlex®	® Y23 (PDF F	ormat)					
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
V49CTF	PowerPlex® Y23 (F	SA Format)						
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
VU7RT9	Yfiler® (PDF Formo	at)						
	16	12,12	14	29	25	9	11	14
1	15	10	11	21	13	17		
				21		11		
WBP6K7	Yfiler®, PowerPlex®	® Y23 (FSA Fo	ormat), (PDF Fo	ormat)				
	16	12,12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
ZBXHF4	Yfiler® (FSA Formo	11)						
	16	12	14	29	25	9	11	14
1	15	10	11	21	13	17		
				21		11		
ZHFNEW	PowerPlex® Y23 (F	SA Format)						
	16	12,12	14	29	25	9	11	14
1	15	10	11	21	13	17	21	12
	9	17	17	21	12	11		
ZVZW34	Yfiler® (PDF Formo	at)						
	16	12,12	14	29	25	9	11	14
1	15	10	11	21	13	17		
				21		11		

TABLE 3

WebCode										
	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393		
ltem	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533		
	DY\$549	DYS570	DYS576	DYS635	DYS643	Y GATA H4				
			Item 4	- YSTR Resul	ts					
29L4L4	Yfiler®, PowerPlex	,	•							
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
	12	20	17	23	11	11				
3GXG4Y	PowerPlex® Y23 (F	SA Format), (F	PDF Format)							
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
	12	20	17	23	11	11				
4N93P9	Yfiler® (PDF Formo	•								
	17	11,14	14	31	24,25	11	11	13		
4	14	11	10	19	16	15				
				23		11				
733884	Yfiler® (PDF Forma	at)								
	17	11,14	14	31	24,25	11	11	13		
4	14	11	10	19	16	15				
				23		11				
AFYKVQ	PowerPlex® Y23 (F	SA Format)								
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
	12	20	17	23	11	11				
AGBJQY										
	17	11,14	14	31	24,25	11	11	13		
4	14	11	10	19	16	15				
				23		11				
EMZPCN	Yfiler® (FSA Formo	11)								
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	-	-		
	-	-	-	23	-	11				
FJVGLJ	Yfiler®, PowerPlex	® Y23 (FSA Fo	ormat), (PDF Fo	ormat)						
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
	12	20	17	23	11	11				
GXRVJR	Yfiler®, PowerPlex	® Y23 (PDF Fo	ormat), (HID Fo	ormat)						
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
	12	20	17	23	11	11				

TABLE 3

WebCode	Amplification Kits (File Format)									
	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393		
ltem	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533		
	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4				
			Item 4	- YSTR Resul	ts					
GZZ8ZT	Yfiler®, PowerPlex	,	ormat), (PDF Fo	ormat), (HID Fo	ormat)					
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
	12	20	17	23	11	11				
HBZXJF	Yfiler® (FSA Formo	at)								
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15				
				23		11				
KNVYAL										
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
	12	20	17	23	11	11				
L48ZJG	PowerPlex® Y23 (F	DF Format), (I	HID Format)							
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
	12	20	17	23	11	11				
LRT3ED	Yfiler®, PowerPlex	® Y23 (FSA Fo	ormat), (PDF Fa	ormat), (HID Fo	ormat)					
	17	11/14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
	12	20	17	23	11	11				
LVQJQ8	Yfiler® (PDF Forma	at)								
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15				
				23		11				
LWNUKP	Yfiler® (PDF Forma	at)								
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	N/A	N/A		
	N/A	N/A	N/A	23	N/A	11				
N34BTG	Yfiler® (FSA Formo	1†)								
	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	_	-		
	-	-	-	23	-	11				
NNJWPH	PowerPlex® Y23 (H									
111777111	17	11,14	14	31	25	11	11	13		
4	14	11	10	19	16	15	23	12		
-7	17	- 11	10	17	10	13	20	12		

TABLE 3

			17	ADLL 3				
WebCode	Amplification K							
	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
Item	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4		
			Item 4	- YSTR Resul	ts			
NWHQ2H	Yfiler® (PDF Formo	at)						
	17	11,14	14	31	25	11	11	13
4	14	11	10	19	16	15		
				23		11		
P9K89B	Yfiler®, PowerPlex®	® Y23 (PDF F	ormat)					
	17	11,14	14	31	25	11	11	13
4	14	11	10	19	16	15	23	12
	12	20	17	23	11	11		
V49CTF	PowerPlex® Y23 (F	SA Format)						
	17	11,14	14	31	25	11	11	13
4	14	11	10	19	16	15	23	12
	12	20	17	23	11	11		
VU7RT9	Yfiler® (PDF Formo	at)						
	17	11,14	14	31	25	11	11	13
4	14	11	10	19	16	15		
				23		11		
WBP6K7	Yfiler®, PowerPlex®	® Y23 (FSA Fo	ormat), (PDF Fo	ormat)				
	17	11,14	14	31	25	11	11	13
4	14	11	10	19	16	15	23	12
	12	20	17	23	11	11		
ZBXHF4	Yfiler® (FSA Formo	ıt)						
	17	11,14	14	31	25	11	11	13
4	14	11	10	19	16	15		
				23		11		
ZHFNEW	PowerPlex® Y23 (F	SA Format)						
	17	11,14	14	31	25	11	11	13
4	14	11	10	19	16	15	23	12
	12	20	17	23	11	11		
ZVZW34	Yfiler® (PDF Formo	at)						
	17	11,14	14	31	25	11	11	13
4	14	11	10	19	16	15		
				23		11		

DNA Conclusions

Based on the examination of the DNA profiles provided, could the Victim (Item 1) and/or the Suspect (Item 2) be included as a possible contributor to the questioned Item?

TABLE 4

	<u>Item</u>	3 Conclusion		<u>lt</u>	em 4 Conclusi	io <u>n</u>
WebCode	# of Contributors	<u>ltem 1</u>	<u>Item 2</u>	# of Contributors	ltem 1	<u>Item 2</u>
29L4L4	2	Excluded	Included	3	Excluded	Included
2X3NH2		Excluded	Included		Excluded	Included
3GXG4Y	2	Excluded	Included	3	Excluded	Included
4N93P9	2	Excluded	Included	3	Excluded	Included
733884	2	Excluded	Included	at least 3	Excluded	Included
AFYKVQ	2	Excluded	Included	Fusion: at least 3	Inconclusive / Uninterpretable	Inconclusive / Uninterpretable
AGBJQY	at least 2 individuals	Excluded	Included	at least three	Excluded	Inconclusive / Uninterpretable
AQZ8MM	Mixture of 2 people	Excluded	Included	Mixture of at least 3 people	Inconclusive / Uninterpretable	Inconclusive / Uninterpretable
C72T4E	2	Excluded	Included	3	Excluded	Included
EMZPCN	2	Excluded	Included	3	Excluded	Included
FJVGLJ	2	Excluded	Included	3	Excluded	Included
FY8V3G	2	Excluded	Included	3	Inconclusive / Uninterpretable	Inconclusive / Uninterpretable
G3QA7G	2	Excluded	Included	at least 3	,	Inconclusive / Uninterpretable
GXRVJR	2	Excluded	Included	3	Excluded	Included
GZZ8ZT	≥2 Contributors; no males detected	Excluded	Included	≥3 Contributors including ≥1 male	Excluded	Included
HBZXJF	at least 2	Excluded	Included	at least 3	Excluded	Included
HJ738P	2	Excluded	Included	at least 3	Excluded	Included
JLR7H9	Two	Excluded	Included	Three	Excluded	Included
K6XYXF	2	Excluded	Included	>/= 3	Excluded	Included
KBP98D	2	Excluded	Included	at least 3	Inconclusive / Uninterpretable	Inconclusive / Uninterpretable
KNVYAL	> or = 2	Excluded	Included	> or = 3 contributors	Excluded	Included
L48ZJG	2	Excluded	Included	3	Excluded	Included

TABLE 4

	<u></u>							
	<u>Item</u>	3 Conclusion		<u>Item 4 Conclusion</u>				
WebCode	# of Contributors	<u>ltem 1</u>	<u>ltem 2</u>	# of Contributors	<u>ltem 1</u>	<u>Item 2</u>		
LRT3ED		Excluded	Included	3	Excluded	Included		
LVQJQ8	2	Excluded	Included	likely 3 or 4	Excluded	Included		
LWNUKP	2	Excluded	Included	>3	Excluded	Included		
N34BTG	at least 2	Excluded	Included	at least 3	Excluded	Included		
NNJWPH	2	Excluded	Included	3	Excluded	Included		
NWHQ2H		Excluded	Included		Excluded	Included		
P9K89B	2	Excluded	Included	3	Excluded	Included		
QL6949	2	Excluded	Included	3		Inconclusive / e Uninterpretable		
UKZM6X	2	Excluded	Included	3	Excluded	Included		
V49CTF	2	Excluded	Included	3	Excluded	Included		
VU7RT9	minimum 2	Excluded	Included	minimum 3	Excluded	Included		
W6YVA8	minimum 2 persons	Excluded	Included	minimum 3 persons	Excluded	Included		
WBP6K7	At least 2 contributors	Excluded	Included	Autosomal=3 / YSTR=1	Excluded	Included		
ZBXHF4	2	Excluded	Included	3	Excluded	Included		
ZHFNEW	2	Excluded	Included	auto=at least 3/Y=1 contributor	Inconclusive / Uninterpretable	Inconclusive / e Uninterpretable		
ZVZW34	2	Excluded	Included	at least 3	Excluded	Inconclusive / Uninterpretable		

Conclusions Re	esponse Sum	mary		Participants reporting	conclusions: 38
Based on the examina			could the Victim outor to the quest	(Item 1) and/or the Suspect (Item ioned Item?	n 2) be included as a
		<u>lte</u>	m 3	<u>lte</u>	m 4
		<u>ltem 1</u>	Item 2	<u>ltem 1</u>	Item 2
S	Included	0	38	0	29
onse	Excluded	38	0	31	0
Respo	Inconclusive	0	0	7	9
Œ	No Response	0	0	0	0
	Total	38	38	38	38

Statistical Analysis for Item 3

WebCode	Item 3 Methods & Results
2X3NH2	Method(s): [Participant did not report a method.]
	Stats Analysis: NO STATISTICAL ANALYSIS WAS DONE
3GXG4Y	Method(s): Likelihood Ratio
	Stats Analysis: One hypothesis was formulated. Item $2+1$ Unknown vs. 2 Unknown (p.o. 0.12) = $2.11E+16$
4N93P9	Method(s): [Participant did not report a method.]
	Stats Analysis: No stats calculated since no probative evidence.
733884	Method(s): [Participant did not report a method.]
	Stats Analysis: I do case file reviews only. I analyze the case data sheets to determine if the results are accurately interpreted and the data is correctly entered into the statistical software. I do not perform any separate statistical analysis.
AFYKVQ	Method(s): [Participant did not report a method.]
	Stats Analysis: Item 3 Powerplex Fusion5C: A mixture of human DNA profiles was identified in Item 3 which was interpreted as a mixture of two people. Assuming this is a mixture of the suspect (Item 2) and one additional contributor, a human female DNA profile was identified from which the victim (Item 1) is excluded. Item 3 major represents the assumed profile of the suspect (Item 2). Item 3 minor represents the profile of the deduced second contributor. ND = not detected; Inc. = inconclusive
AGBJQY	Method(s): Random Match Probability
	Stats Analysis: Asian: 1.46 x 10 ^ 29. Hispanic: 2.14 x 10 ^ 28. African American: 1.99 x 10 ^ 29. Caucasian: 8.40 x 10 ^ 27
C72T4E	Method(s): Combined Probability of Exclusion/Inclusion
	Stats Analysis: The probability of selecting an unrelated individual at random having alleles at all Fusion 6C autosomal loci consistent with any contributor to this mixture is approximately 1 in 300 trillion [300E12] in the Caucasian population and 1 in 20 quadrillion [20E15] in the African American population.
EMZPCN	Method(s): Likelihood Ratio, Random Match Probability
	Stats Analysis: RMP= 1.18525×10^{-28} . LR= 8.44×10^{-27} . The mixed DNA profile from Item 3 are 8.44 octillion (8.44×10^{-27}) times more likely; if they originated from Item 2(suspect) and Unknown Person 1 rather than; if they originated from two unknown unrelated individuals as calculated bases on the Caucasian DNA population database below
FJVGLJ	Method(s): Likelihood Ratio
	Stats Analysis: TOTAL LR: 9.660.845.349.762.920.000. The finding is 9.660.845.349.762.920.000 times more likely, if the mixture comes from the suspect and at least one unknown individual, that if it comes from at least two unknown individuals randomly taken in the reference population.
GXRVJR	Method(s): [Participant did not report a method.]
	Stats Analysis: Item #3 consists of a DNA mixture from at least 2 individuals. Suspect (Item #2) is included as a potential contributor to this mixture. There is evidence of an additional contributor, apparently female in origin (Unknown #1), to the DNA mixture profile from Item 3. Victim (Item #1) is excluded as a potential contributor to the DNA mixture profile from Item #3.

WebCode	Item 3 Methods & Results
GZZ8ZT	Method(s) : Likelihood Ratio Stats Analysis: Under the assumption that the SUSPECT (Item 2) and one unrelated person selected at random from the general population are contributors to this mixture, the likelihood of observing this mixed source profile is $\geq 1,000,000$ times greater (actual LR available upon request) than if it is assumed that two unrelated persons selected at random from the general population are contributors to this mixed-source sample.
HBZXJF	Method(s): Likelihood Ratio Stats Analysis: The mixed DNA profile are 1.1 quadrillion (1.1 x 10exp15), 6.9 quadrillion (6.9 x 10exp15) and 15 quadrillion (15 x 10exp15) TIMES more likely; IF they originated from ITEM 2 and one unknown individual RATHER THAN; IF they originated from two unknown unrelated individual as calculated based on [Location-identifying databases listed by participant].
JLR7H9	Method(s): Combined Probability of Exclusion/Inclusion Stats Analysis: The results identified from item 3 are consistent with a mixture of DNA from two contributors. Item 2 (Suspect) cannot be excluded as a possible contributor to this mixture of DNA. Using 21 of 21 loci, the probabilities of selecting an unrelated individual at random who cannot be excluded as one of the possible sources of the DNA profile obtained from the item are approximately: 1 in 1.621 Trillion CPI; >99.9% CPE in the Caucasian population. 1 in 115.4 Trillion CPI; >99.9% CPE in the African American population. 1 in 2.274 Trillion CPI; >99.9% CPE in the Hispanic population
KBP98D	Method(s): [Participant did not report a method.] Stats Analysis: A mixture of human DNA profiles was identified in Item 3 which was interpreted as a mixture of two people. Assuming this is a mixture of suspect and one additional contributor, a DNA profile was identified from which victim can be excluded.
KNVYAL	Method(s): [Participant did not report a method.] Stats Analysis: No statistical evaluation given that the sample was taken from the suspects shirt and therefore the presence of her DNA is not evidentially significant.
L48ZJG	Method(s): Likelihood Ratio Stats Analysis: LR=1,72E014 Hp_(item_2+1_unknown_person) vs. Hd_(2_unknown_persons)
LVQJQ8	Method(s): Likelihood Ratio Stats Analysis: A mixed DNA profile consistent with having originated from 2 individuals was obtained from Item 3. The Suspect is included as one of the possible sources of the DNA mixture. It is 3.8 septillion times more likely that the observed profile occurred as a result of a mixture of the Suspect and an unknown individual than if it originated from two unrelated individuals selected at random from the local [Ethnicity] population.
LWNUKP	Method(s): [Participant did not report a method.] Stats Analysis: I am a forensic consultant that reviews DNA case files that are submitted to me as evidence. I review the analyst allele calls and evidence to reference sample comparisons so I can understand how the original analyst arrived at their opinions and conclusions. I accept that the population calculations are correct. NSD: No Size Data, INC: Inconclusive, N/A Not Applicable
N34BTG	Method(s): Likelihood Ratio Stats Analysis: The mixed DNA profile are 1.1 quadrillion (1.1 x 10^15), 6.9 quadrillion (6.9 x 10^15) and 15 quadrillion (15 x 10^15) TIMES more likely; IF they originated from "Item 2" and one unknown RATHER THAN; IF they originated from two unknowns unrelated individual as calculated based on [Location-identifying databases listed by participant].

WebCode	Item 3 Methods & Results
NNJWPH	Method(s): Likelihood Ratio Stats Analysis: The observed mixture profile is approximately 3.04x10^18 times more likely to occur under the scenario that it is a mixture of DNA from the suspect and an unknown individual, as opposed to the scenario that it originated from a mixture of DNA from two unrelated unknown individuals, in the African American population. The observed mixture profile is approximately 1.23x10^17 times more likely to occur under the scenario that it is a mixture of DNA from the suspect and an unknown individual, as opposed to the scenario that it originated from a mixture of DNA from two unrelated unknown individuals, in the Caucasian population. The observed mixture profile is approximately 5.25x10^17 times more likely to occur under the scenario that it is a mixture of DNA from the suspect and an unknown individual, as opposed to the scenario that it originated from a mixture of DNA from
	two unrelated unknown individuals, in the Hispanic population.
P9K89B	Method(s): Likelihood Ratio Stats Analysis: 9.660.845.349.762.920.000; 9 Trillones
UKZM6X	Method(s): Likelihood Ratio Stats Analysis: At least 100 billion (Laboratory threshold)
V49CTF	Method(s): [Participant did not report a method.] Stats Analysis: No calculation necessary on this item as it is the suspect's DNA present on her own item which is expected.
VU7RT9	Method(s): [Participant did not report a method.] Stats Analysis: No requirement for statistics as shirt belongs to suspect. Could condition based on suspect profile.
W6YVA8	Method(s): [Participant did not report a method.] Stats Analysis: When it is a case where donor's DNA is on his own clothes we routinely do not calculate likelihood ratio. Usually finding person's DNA on his own clothes is not disputed. We do calculations in this kind of case only if investigator or prosecutor requests. This is the reason why we did not submit LR calculations for Item 3.
WBP6K7	Method(s): [Participant did not report a method.] Stats Analysis: The PowerPlex Fusion 5C, 6C and Globalfiler DNA profiles from item #3 (question sample from stain on suspect's shirt) are consistent with being mixtures of at least two individuals. Item #1 (victim) is excluded as being a contributor to the PowerPlex Fusion 5C, 6C and Globalfiler DNA profiles from item #3. Item #2 (suspect) is included as being a possible contributor to the PowerPlex Fusion 6C and Globalfiler DNA profiles from item #3.
ZHFNEW	Method(s): not applicable Stats Analysis: A mixture of human DNA profiles was identified in Item 3 (suspect's shirt) that has been interpreted as a mixture of 2 people. Assuming this is a mixture of the suspect and one additional contributor, a female DNA profile was identified from which the victim is excluded.
ZVZW34	Method(s): Likelihood Ratio Stats Analysis: 2.9 E+08 is the likelihood ratio when comparing two hypotheses. Hypothesis 1 (numerator) is that the mixture is that of the suspect and one unknown individual. Hypotheses 2 (denominator) is that the mixture is that of two unknown individuals.

Statistical Analysis for Item 4

WebCode	Item 4 Methods & Results
29L4L4	Method(s): Likelihood Ratio Stats Analysis: The DNA profile of the trace found from the beer bottle (Item 4) has been compared with the profile of the suspect (Item 2). The results of the comparison were assessed given the propositions that (a) The DNA originates from the suspect and two unknown persons; (b) The DNA originates from three unknown persons. The DNA results are in the order of 1E+11 times more probable if the first proposition (a) is true than if the alternative (b) is true.
2X3NH2	Method(s): [Participant did not report a method.] Stats Analysis: NO STATISTICAL ANALYSIS WAS DONE
3GXG4Y	Method(s): Likelihood Ratio Stats Analysis: Two hypotheses were firstly formulated: Item $1+2$ Unknown vs. 3 Unknown (p.o. 0.1) = $2.00E-17$. Item $2+2$ Unknown vs. 3 Unknown (p.o. 0.15) = $1.67E+11$. Then an other hypothesis was tested. Item $1+1$ Item $2+1$ Unknown vs. Item $2+2$ Unknown (p.o. 0.1) = $3.37E-20$
4N93P9	Method(s): Combined Probability of Exclusion/Inclusion Stats Analysis: The probability of randomly selecting an unrelated individual who would be included as a contributor to the DNA mixture profile developed is approximately 1 in 600 thousand.
733884	Method(s): [Participant did not report a method.] Stats Analysis: I do case file reviews only. I analyze the case data sheets to determine if the results are accurately interpreted and the data is correctly entered into the statistical software. I do not perform any separate statistical analysis.
AFYKVQ	Method(s): [Participant did not report a method.] Stats Analysis: Item 4 PowerPlex Fusion5C: A mixture of human DNA profiles was identified in Item 4 which was interpreted as a mixture of at least three people. This mixture is potentially incomplete and not suitable for comparisons. Item 4 PowerPlex Y23: A human Y-STR DNA haplotype was identified in Item 4 which does not match the Y-STR DNA haplotype of the victim (Item 1). ND = not detected. Please note that the suspect standard (Item 2) was not amplified in PowerPlex Y23.
C72T4E	Method(s): Combined Probability of Exclusion/Inclusion Stats Analysis: The probability of selecting an unrelated individual at random having alleles at all Fusion 6C autosomal loci, except D3S1358, D5S818, and D22S1045 loci, consistent with any contributor to this mixture is approximately 1 in 1 billion in the Caucasian population and 1 in 20 billion in the African American population.
EMZPCN	Method(s): Combined Probability of Exclusion/Inclusion Stats Analysis: Combined PI= 1.9 x 10^-10. Combined PE= 99.9999999805. No. of possible random contributors= 0. The proportion of caucasian population whose individual DNA profile cannot be excluded as contributors of the mixed DNA profile is 1.9x10^-10
FJVGLJ	Method(s): Likelihood Ratio Stats Analysis: TOTAL LR: 56.168.386.658.482. The finding is 56.168.386.658.482 times more likely if the mixture comes from the suspect and at least two unknown individuals, that if it comes from at least three unknown individuals randomly taken in the reference population.

WebCode	Item 4 Methods & Results				
GXRVJR	Method(s): [Participant did not report a method.]				
	Stats Analysis: Item 4 consists of a DNA mixture of at least 3 individuals, 2 that are apparently female in origin and 1 that is apparently male in origin. Suspect (Item #2) cannot be excluded as a potential contributor to this mixture. The unknown female (unknown #1) from Item #3 is excluded as a potential contributor to this mixture, and therefore the other potential female contributor in the mixture profile from Item #4 is an additional unknown (unknown #2). Victim (Item #1) is excluded as a potential contributor to the DNA mixture from Item #4. The male contribution is therefore an additional unknown (unknown #3).				
GZZ8ZT	Method(s): Likelihood Ratio				
	Stats Analysis : Under the assumption that the SUSPECT (Item 2) and two unrelated persons selected at random from the general population are contributors to this mixture, the likelihood of observing this mixed source profile is $\geq 1,000,000$ times greater (actual LR available upon request) than if it is assumed that three unrelated persons selected at random from the general population are contributors to this mixed-source sample.				
HBZXJF	Method(s): Likelihood Ratio				
	Stats Analysis : The mixed DNA profile are 140 billion (140 x 10exp9), 610 billion (610 x 10exp9) and 1.3 trillion (1.3 x 10exp12) TIMES more likely; IF they originated from ITEM 2 and two unknown individual RATHER THAN; IF they originated from three unknown unrelated individual as calculated based on the [Location-identifying databases listed by participant].				
HJ738P	Method(s): Combined Probability of Exclusion/Inclusion				
	Stats Analysis: African-American: 1 in 8.15E+10; Caucasian: 1 in 5.13E+09; Hispanic: 1 in 5.07E+09; Asian 1 in 3.87E+09				
JLR7H9	Method(s): Combined Probability of Exclusion/Inclusion				
	Stats Analysis: The results identified from item 4 are consistent with a mixture of DNA from three contributors. Item 2 (Suspect) cannot be excluded as a possible contributor to this mixture of DNA. Using 21 of 21 loci, the probabilities of selecting an unrelated individual at random who cannot be excluded as one of the possible sources of the DNA profile obtained from the item are approximately: 1 in 5.218 Billion CPI; >99.9% CPE in the Caucasian population. 1 in 84.25 Billion CPI; >99.9% CPE in the African American population. 1 in 5.068 Billion CPI; >99.9% CPE in the Hispanic population				
KBP98D	Method(s): [Participant did not report a method.]				
	Stats Analysis: A mixture of DNA profiles was identified in Item 4 that is unsuitable for comparison.				
KNVYAL	Method(s): Likelihood Ratio				
	Stats Analysis: likeLTD software has been used to determine likelihood ratio. [Laboratory] would routinely use STRmix for profiles of this type but only for profiles run in house using NGMSELect as the software is set up with [Laboratory] validation data. likeLTD does not rely on internal validation data and can be used for all kits. Only DNA-17 locii have been included in the statistical evaluation which has resulted in a likelihood ratio of 1.8 million. The result would be reported as follows: The DNA profile from sample 4 includes results which are due to the presence of DNA from at least three individuals. All of the results in the DNA profile of the suspect are represented in the DNA profile from item 4 as I would expect if her DNA is present. The significance of these results has been statistically evaluated using probabilistic genotyping software (likeLTD) by considering the following two alternative propositions: The DNA is from the suspect and two others who are unrelated to each other and the suspect. The DNA is from three individuals who are unrelated to each other and to the suspect. The result of the statistical evaluation is that the findings are approximately 1.8 million times more likely if the first proposition is true rather than if the second proposition is true.				
L48ZJG	Method(s): Likelihood Ratio				
	Stats Analysis: LR=7,47E09 Hp_(item_2+2_unknown_persons) vs. Hd_(3_unknown_persons)				

WebCode	Item 4 Methods & Results				
LRT3ED	Method(s): Likelihood Ratio				
	Stats Analysis : It is 56.168.386.658.562 more likely if the mixture comes from the suspect and two unknown individuals to come from at least 3 unknown individuals taken at random from the reference population.				
LVQJQ8	Method(s): Likelihood Ratio				
	Stats Analysis: A mixed DNA profile consistent with having originated from 3 or more individuals was obtained from Item 4. The Suspect is included as one of the possible sources of the DNA mixture. Assuming the mixture had originated from 4 individuals, it is 6.5 sextillion times more likely that the observed profile occurred as a result of a mixture of the Suspect and three unknown individuals than if i originated from four unrelated individuals selected at random from the local [Ethnicity] population. Alternatively, if the mixture had originated from 3 individuals instead, it is 75 septillion times more likely that the observed profile occurred as a result of a mixture of the Suspect and two unknown individuals than if it originated from three unrelated individuals selected at random from the local [Ethnicity] population.				
LWNUKP	Method(s): [Participant did not report a method.]				
	Stats Analysis : I am a forensic consultant that reviews DNA case files that are submitted to me as evidence. I review the analyst allele calls and evidence to reference sample comparisons so I can understand how the original analyst arrived at their opinions and conclusions. I accept that the population calculations are correct. NSD: No Size Data, INC: Inconclusive, N/A Not Applicable				
N34BTG	Method(s): Likelihood Ratio				
	Stats Analysis: The mixed DNA profile are 140 billion (140 x 10^9), 610 billion (610 x 10^9) and 1.3 trillion (1.3 x 10^12) TIMES more likely; IF they originated from "Item 2" and two unknowns RATHER THAN; IF they originated from three unknowns unrelated individual as calculated based on [Location-identifying databases listed by participant]				
NNJWPH	Method(s): Likelihood Ratio				
	Stats Analysis: The observed mixture profile is approximately 2.48x10 ^ 13 times more likely to occur under the scenario that it is a mixture of DNA from the suspect and two unknown individuals, as apposed to the scenario that it originated from a mixture of DNA from three unrelated unknown individuals, in the African American population. The observed mixture profile is approximately 1.19x10 ^ 12 times more likely to occur under the scenario that it is a mixture of DNA from the suspect and two unknown individuals, as apposed to the scenario that it originated from a mixture of DNA from three unrelated unknown individuals, in the Caucasian population. The observed mixture profile is approximately 4.38x10 ^ 12 times more likely to occur under the scenario that it is a mixture of DNA from the suspect and two unknown individuals, as apposed to the scenario that it originated from a mixture of DNA from three unrelated unknown individuals, in the Hispanic population.				
P9K89B	Method(s): Likelihood Ratio Stats Analysis: 56.168.386.652.562; 56 Billones				
UKZM6X	Method(s): Likelihood Ratio				
	Stats Analysis: At least 100 billion (Laboratory threshold)				
V49CTF	Method(s): Likelihood Ratio				
	Stats Analysis: The genetic profile obtained from Item 4 is interpreted as a mixture of DNA from three contributors. Item 2 (suspect) cannot be excluded as a possible contributor to this mixture. Given this genetic profile, assuming three contributors, it is 22.7 billion times more likely to observe this genetic profile if Item 2 (suspect) and two unknown individuals are contributors than if three unknown individuals are the contributors.				

WebCode	Item 4 Methods & Results
VU7RT9	Method(s): [Participant did not report a method.]
	Stats Analysis: Recommend profile for STRmix analysis
W6YVA8	Method(s): Likelihood Ratio
	Stats Analysis: LR=E011 (ten to the power of 11). Hypotheses: Hp: suspect $+$ 2 unknowns, Hd: 3 unknowns. Pr(drop-out) =0,14. Pr (drop-in) = 0,05. Theta = 0,01
WBP6K7	Method(s): Combined Probability of Exclusion/Inclusion, Counting Method - YSTR Stats Analysis: The PowerPlex Fusion 5C, 6C and Globalfiler DNA profiles from item #4 (swab from beer bottle found at crime scene) are consistent with being mixtures of at least three individuals, with one of the contributors being male. Item #1 (victim) is excluded as being a contributor to the PowerPlex Fusion 5C, 6C and Globalfiler DNA profiles from item #4. Item #2 (suspect) is included as being a possible contributor to the PowerPlex Fusion 5C, 6C and Globalfiler DNA profiles from item #4. The expected frequency of individuals who could be a possible contributor to the PowerPlex Fusion 5C, 6C and Globalfiler DNA profiles from item #4 is approximately 1 in 2.2 million in the African American population, approximately 1 in 425,000 in the Caucasian population, and approximately 1 in 1.4 million in the Hispanic population. The Powerplex Y23 and Y-Filer YSTR DNA profiles from item #4 (swab from beer bottle found at crime scene) is consistent with being single source (1 contributor). Item #1 (victim) is excluded as being the source of the Powerplex Y23 and Y-Filer YSTR DNA profiles from item #4. The Powerplex Y23 YSTR DNA profile from item #4 was searched within the YHRD.org YSTR Database. The Powerplex Y23 YSTR DNA profile from item #4 was not seen in the database of 62,737 male haplotypes. Using the 95% Confidence Interval (CI), the expected frequency of males who could have been the source of the PowerPlex Y23 DNA profile from item #4 is approximately 1 in 17,000 males.
ZHFNEW	Method(s): [Participant did not report a method.]
	Stats Analysis : Autosomal: A mixture of human DNA profiles were identified in Item 4 that has been interpreted as mixture of at least 3 people. This mixture is inconclusive for comparison to evidentiary and known profiles. YSTR: A Y-STR haplotype was identified in Item 4 in which the victim (Item 1) is excluded.

Databases Used

WebCode	Databases Used
29L4L4	Item 3:
	Item 4: [Ethnicity] population database
3GXG4Y	Item 3: Caucasian Nist Database
	Item 4: Caucasian NIST Database
4N93P9	Item 3:
	Item 4: FBI expanded
AGBJQY	Item 3: Allele frequencies were obtained from NIST 1036 Revised US Population Database (July 2017) located at https://strbase.nist.gov/NISTpop.htm. Item 4:
C72T4E	Item 3: CODIS\Popstats\Expanded FBI STR 2015
0, 2, 12	Item 4: CODIS\Popstats\Expanded FBI STR 2015
EMZPCN	Item 3: https://strbase.nist.gov/NISTpop.htm; 1036-Revised-Allele-Freqs-PopStats-July-19-2017.xlsx (caucasian)
	Item 4: https://strbase.nist.gov/NISTpop.htm; 1036-Revised-Allele-Freqs-PopStats-July-19-2017.xlsx (caucasian); =5/(2N) was used for FGA(allele 30)
FJVGLJ	Item 3: [Country-specific databases listed by participant].
	Item 4: [Country-specific databases listed by participant].
GZZ8ZT	Item 3: Revised-NIST-1036-Allele Frequencies, ABI ID Database + Promega PP Fusion
	Item 4: Revised-NIST-1036-Allele Frequencies, ABI ID Database + Promega PP Fusion
HBZXJF	Item 3: [Location-identifying databases listed by participant]
	Item 4: [Location-identifying databases listed by participant]
HJ738P	Item 3:
	Item 4: NIST 1036
JLR7H9	Item 3: National Institute of Standards (NIST) Population database
	Item 4: National Institute of Standards (NIST) Population database
KNVYAL	Item 3:
	Item 4: [Location-identifying database listed by participant]
L48ZJG	Item 3: U.Spopulation_data_for_29_autosomal_STR_loci.Forensic_Sci.Int.Genet.
	Item 4: U.Spopulation_data_for_29_autosomal_STR_loci.Forensic_Sci.Int.Genet.
LRT3ED	Item 3:
	Item 4: [Country-specific databases listed by participant].
LVQJQ8	Item 3: Local [Ethnicity] database
	Item 4: Local [Ethnicity] database
N34BTG	Item 3: [Location-identifying databases listed by participant]
	Item 4: [Location-identifying databases listed by participant]
NNJWPH	Item 3: Lab Retriever
	Item 4: Lab Retriever

WebCode	Databases Used
P9K89B	Item 3: [Country-specific databases listed by participant].
	Item 4: [Country-specific databases listed by participant].
UKZM6X	Item 3: [Ethnicity] Caucasian
	Item 4: [Ethnicity] Caucasian
V49CTF	Item 3:
	Item 4: NIST
W6YVA8	Item 3:
	Item 4: [Ethnicity] population database was used.
WBP6K7	Item 3: No Statistic Required - Suspect's DNA profile on her own shirt. CPE/CPI calculated upon request. Sample profile outsourced for probabilistic statistics upon request.
	Item 4: Autosomal = CT State Database (IDP); YSTR = YHRD.org; Sample profile outsourced for probabilistic statistics upon request.
ZVZW34	Item 3: Popstats Expanded FBI STR 2015
	Item 4:

Amplification Kit Survey

Please list all PCR amplification kits (Autosomal and YSTR) utilized as well as any future kits yet to be implemented in your laboratory.

WebCode	Amplification Kit
2X3NH2	IDENTIFILER PLUS, IDENTIFILER DIRECT
3GXG4Y	PowerPlex Y23, PowerPlex Fusion, PowerPlex Fusion6C, PowerPlex ESI System, PowerPlex ESX System, GlobalFiler, YFiler, NGMSElect, MiniFiler, Qiagen 24Plex QS, Argus X-12
FJVGLJ	Power Plex Fusion HS, Power Plex PP 21, Power Plex Y23, Power Plex ESX 17, GlobalFiler, Yfiler, VeriFiler
GZZ8ZT	Yfiler Plus, PowerPlex Y23, Globalfiler, Investigator 24 Plex, PowerPlex Fusion 5C and 6C
HBZXJF	1. Applied Biosystem GlobalFiler Express PCR Amplification Kit. 2. Applied Biosystem AmpFISTR Identifiler Plus PCR Amplification Kit. 3. Applied Biosystem AmpFISTR Yfiler PCR Amplification Kit. 4. Applied Biosystem AmpFISTR Minifiler PCR Amplification Kit. 3. Applied Biosystem Globalfiler PCR Amplification Kit.
JLR7H9	Promega PowerPlex Y23, Applied Biosystems Globalfiler
P9K89B	PowerPlex® ESX17, PowerPlex® CS7, PowerPlex® 21, VeriFiler™, YFilerPlus™.
W6YVA8	NGM, ESI17 Fast, Fusion 6C, YFiler Plus
ZVZW34	Globafiler, Yfiler

Additional Comments

WebCode	Additional Comments
733884	Item #3: No male DNA developed from the sample from the suspect's shirt. D1S1656 has a 15 allele that calculates as a stutter allele. No other locus has more than 4 alleles present = a 2 person mixture. Item #4: Y-Filer shows a single male profile, which excludes the victim from this item. B_DYS390 has a 24 allele which calculates as a stutter allele.
AFYKVQ	Item 3: With Fusion 5C, this sample was interpreted as a mixture of two people; assuming the suspect is one of the contributors, a female profile was deduced from which the victim (Item 1) can be excluded. "Item 3 major" refers to the assumed profile of the suspect (Item 2) "Item 3 minor" refers to the deduced female profile resulting from the assumption of the suspect's profile. Item 4: With Fusion 5C, this sample was interpreted as a mixture of at least three people; this mixture is potentially incomplete and not suitable for comparisons. Item 4: With PowerPlex-Y23, this sample was interpreted as a single-source Y-STR DNA haplotype from which the victim (Item 1) is excluded. Please note that Item 2 was not profiled in PowerPlex-Y23.
AQZ8MM	Item 3: Mix of two assuming the suspect. The "major" profile represents the assumed profile and "minor" profile represents the deduced profile. Item 4: unresolved mixture that was not interpreted. INC = inconclusive
FY8V3G	Item 3 Major: Assumed Profile; Item 3 Minor: Deduced Profile; Item 4: 18 allele at FGA falls below AT, allele not included on summary sheet
G3QA7G	Item 3 "major" profile represents the assumed profile of the suspect. The "minor" profile represents the deduced unknown profile. inc= inconclusive/ any possible sister allele
GXRVJR	The 13 in DYS456 of the Yfiler Positive control is likely an artifact, but would have been requested to be reinjected to troubleshoot. Due to the number of additional peaks in the positive control for sample c190514KN01G in Globalfiler, this would have been requested to have been reinjected to determine if contamination was present or not. The associated samples would have needed reextraction if the extra peaks could not be resolved.
GZZ8ZT	NOTE: Positive Control (2019-08-29-10-33-16_C10_c190514KN01G) for Item 2 (Globalfiler): Shows a clear indication of possible contamination by a minor contributor at multiple loci. Possibly tube-specific since the negative and reagent blank controls all passed. The minor contributor does not appear to be consistent with the lowest or other minor contributors in item 4. Also, the minor contributor peaks do not appear to be present in suspect's reference sample.
HBZXJF	Data Analysis: 1. The HID data was analyzed with GeneMapper ID-X v1.5 software. 2. The FSA data was analyzed with GeneMapper ID v3.2 software. 3. Statistical evaluation was performed on DNA-view ver37.37.
НЈ738Р	Item 3: This is a two person (F:F) mixture with an estimated mixture ratio of 58:42. The female suspect (Item 2) is included as a possible contributor and the male victim (Item 1) is excluded. Assumed the presence of the female suspect (Item 2) on the shirt collected from her apartment and deduced the foreign female profile. The profile reported as "Item 3 major" is the deduced female profile. The profile reported as "Item 3 minor" is the assumed female profile. Statistics are not calculated for an exclusion. Item 4: Three person mixture. No access to Probabilistic Genotyping software.
K6XYXF	Possible low level contamination was noted in the Positive Control in well C10 of 2019-08-29-10-33-16. This control is associated with Item 2 (suspect reference) and would need further investigation.
KBP98D	For Item 3"3 major" represents the alleles of the assumed DNA profile; "3 minor" represents the alleles of the deduced DNA profile. Please note "inc." indicates inconclusive.
N34BTG	1. The HID data was analysed with GeneMapper ID-X v1.5 Software. 2. The FSA data was analysed with GeneMapper ID v3.2 Software. 3. Statistical evaluation was performed on DNA View Software ver 37.37. 4. For YSTR analysis were based on 3130xL interpretation guidelines as follows: Analytical Threshold: 50 rfu, Peak Height Ratio: 60%, Stochastic Threshold: 100 rfu.

WebCode	Additional Comments
P9K89B	There is no information about line cell of positive controls, therefore we couldn't confirm alellic assignment.
QL6949	NT=Not Tested. ND=Not Detected. INC=Inconclusive. ITEM 3-Major represents assumed profile of suspect and minor represents deduced unknown female profile.
UKZM6X	Sample 1: OL @ D12S391 removed as pull up from D13S317. Sample 2: OL @ D22S1045 removed as pull up from Amel. Sample 3: 15 @ D1S1656 removed as stutter. Sample 4: 10 @ DYS391 removed as stutter
ZBXHF4	Markers with empty boxes indicate that no analysis was performed. Markers filled with a single dash "-" indicate that no alleles resulted. The mixture interpretation threshold used for analysis was 175 RFU.
ZHFNEW	Item 3: The "major" profile represents the assumed female suspect profile from the her shirt and the "minor" represents the deduced female. Item 4: The # of contributors represented in the autosomal results at least 3 contributors and is inconclusive for comparison. The # contributors represented in the YSTR results is one male contributor. The victim is excluded.
ZVZW34	Only 11 loci in Item 3 met laboratory reporting guidelines for statistics. Item 4 did not meet laboratory reporting guidelines for mixtures. The following comments apply to the GlobalFiler results: The positive control in well C10 failed due to what looks like low level contamination. See loci D8, FGA, and D10 for example. I can not tell if two amplifications were done and if so which one this positive control is for. It appears that the same negative control was injected twice. If there were two amplifications where is the second negative control? Is the reagent blank in well B07 injected twice? Does this reagent blank apply to the questioned samples or the knowns? Since questions and knowns must be extracted separately there should be two reagent blanks. Where is the other reagent blank? Yfiler results: Size standard for positive control failed. Needed to be re-injected.

Collaborative Testing Services ~ Forensic Testing Program

Test No. 19-589: DNA Interpretation

DATA MUST BE SUBMITTED BY Dec. 2, 2019, 11:59 p.m. TO BE INCLUDED IN THE REPORT

Participant Code: U1234A WebCode: 8NML8B

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

Scenario:

A physical altercation occurred at a bar involving a male and a female. The male victim was pushed backwards onto a table, resulting in loss of consciousness. The female suspect immediately ran from the scene. Both individuals incurred wounds. Upon investigation, the suspect was identified and apprehended. In addition, a shirt was found and collected from the suspect's apartment containing reddish brown stains. A beer bottle believed to be the suspect's was also collected at the scene where the crime occurred. Known samples from the male victim (Item 1) and the female suspect (Item 2) are provided. The reddish brown stain recovered from the shirt at the suspect's apartment was confirmed as blood by the Serology unit and subsequently submitted for DNA analysis (Item 3). A swab from the beer bottle found at the crime scene was also submitted for DNA analysis (Item 4). The DNA unit has completely consumed all evidence and has provided you with DNA profiles obtained from the items. You are requested to evaluate the DNA profiles using your laboratory-specific guidelines and report your results.

FSA, HID and PDF file formats are provided for use in this test, choose any or all formats for evaluation.

Items Submitted (Sample Pack INT2):

Item 1: DNA profile from reference sample (Male Victim - Hispanic)

Item 2: DNA profile from reference sample (Female Suspect - Caucasian)

Item 3: DNA profile found in the stain on the suspect's shirt

Item 4: DNA profile found from the beer bottle

Part I: DNA ANALYSIS INSTRUCTIONS

- Use your laboratory's Interpretation guidelines for evaluation of this test.

 Please report Laboratory Specific Interpretation Guidelines below per amplification kit.

 If interpretation guidelines are not reported, the consensus information will be utilized in the review of results.

Il iliterpretation guidetines are not report	rted, the consens	sus illiorillation	witt be utilized i	ii tile review or i	Courts
Analytical Threshold:					
Peak Height Ratio (%):					
Stochastic Threshold (Peak Amplitude):					

If you do not have Interpretation guidelines, please use the following guidelines and report these values above:

For STR Analysis: Analytical Threshold: 75 rfu, Peak Height Ratio: 60%, Stochastic Threshold (Peak Amplitude): 100 rfu

For YSTR Analysis: Analytical Threshold: 75 rfu, Peak Height Ratio: 50%, Stochastic Threshold (Peak Amplitude): 75 rfu

!!! IMPORTANT NOTE !!!

If you opt to analyze the .FSA files for YFiler, please note that you must change your analysis settings for the LIZ GS500 size standard to ignore the 250 bp peak.

- Report the allelic results for each Item in the appropriate response boxes.
- If major and minor contributor(s) can be distinguished and your laboratory normally reports this distinction, report the results of the major profile and the minor profile in the appropriately labeled boxes; otherwise, list the alleles in numerical order in the remaining row of boxes labeled with the Item number.
- Please Note: Samples were completely consumed during extraction.

Part I: DNA ANALYSIS

STR & Amelogenin Results for Known Item 1

- Report alleles in numerical order, separated by a comma.
- c (ie X X or X) and null

 Follow your laboratory proced 	dures for reporting homozygotes (i.e.	X,X or X) and null responses.	
STR Amplification Kit Used	For Item 1:	Please indicate the electropherog	gram(s) reviewed for this test.
□ GlobalFiler™ □ HID format	□ Investigator® 24plex □ PDF format	PowerPlex® Fusion 5C FSA format	PowerPlex® Fusion 6C
Report the Probabilistic Genot	typing Software Used (if applica	ıble):	

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

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

YSTR Results for Known Item 1

YSTR Amplification Kit Used	d For Item 1:	Please indicate the electropherogra		
☐YFiler™	PowerPlex® Y23	FSA format	HID format	PDF format

Alleles below are sorted in ${\it Default}$ order.

ITEM	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
1								
ITEM	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
1								
ITEM	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4		
1								

Test No. 19-589 Data Sheet, continued Participant Code: U1234A WebCode: 8NML8B

Part I: DNA ANALYSIS (continued)

STR & Amelogenin Results for Known Item 2

• Report alleles in numerical order, separated by a comma.

٠	Follow your laboratory pro	cedures for reporting	homozygotes (i.e. X,X	or X) and null responses.

• Tottow your taboratory procedures for reporting noniozygotes (i.e. λ, λ or λ) and nutt responses.							
STR Amplification Kit Used	For Item 2:	Please indicate the electropherogr	am(s) reviewed for this test.				
□GlobalFiler™ □HID format	□ Investigator® 24plex □ PDF format	PowerPlex® Fusion 5C	PowerPlex® Fusion 6C				
Report the Probabilistic Genot	typing Software Used (if applical	ble):					

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

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

YSTR Results for Known Item 2

YSTR Amplification Kit Used	f For Item 2:	Please indicate the electropherogra	am(s) reviewed for this test.	
□ YFiler™	PowerPlex® Y23	FSA format	HID format	\square PDF format

Alleles below are sorted in ${\it Default}$ order.

ITEM	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
2								
ITEM	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
2								
ITEM	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4		
2								

Part I: DNA ANALYSIS (continued)

STR & Amelogenin Results for Questioned Item 3

• Report alleles in numerical order, separated by a comma.

Follow your laboratory procedures for reporting homozygotes (i.e. X,X or X) and null responses.
 For each locus, if a major and minor contributor can be distinguished and your laboratory normally reports this distinction, record the results in the appropriately labeled response hoxes

appropriately labeled respons	e boxes.			
STR Amplification Kit Used	For Item 3:	Please indicate the electropherogra	am(s) reviewed for this test.	
□GlobalFiler™ □HID format	☐ Investigator® 24plex ☐ PDF format	PowerPlex® Fusion 5C FSA format	PowerPlex® Fusion 6C	
Report the Probabilistic Genot	yping Software Used (if applica	ble):		

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

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

YSTR Results for Questioned Item 3

	•			
YSTR Amplification Ki	t Used For Item 3:	Please indicate the electroph	erogram(s) reviewed for this te	est.
☐YFiler™	PowerPlex® Y23	FSA format	HID format	PDF format

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

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

Part I: DNA ANALYSIS (continued). Item 3 DNA Analysis Questions	
1) Record the number of contributors found in the Item 3 DNA profile:	
2) Choose the conclusion statement that best describes the results of the analysis for with the Known Items (If the wording below differs from the normal wording of your conclusions as best you can and use your preferred wording in the Additional Comment Item 1 Conclusion	conclusions, adapt these
Item 1 (victim) is included (cannot be excluded) as a possible contributor to the DNA obtained	I from Item 3.
Item 1 (victim) is excluded as a possible contributor to the DNA obtained from Item 3.	
The DNA typing results for Item 3 in comparison with Item 1 are inconconclusive/uninterpreta	ble.
Item 2 Conclusion	
Oltem 2 (suspect) is included (cannot be excluded) as a possible contributor to the DNA obtained	ed from Item 3.
\odot Item 2 (suspect) is excluded as a possible contributor to the DNA obtained from Item 3.	
The DNA typing results for Item 3 in comparison with Item 2 are inconconclusive/uninterpreta	ble.
3) Statistical Analysis of Item 3 DNA Typing Results: Select the statistical method(s) used by marking the associated box and report these	results in the space below:
Combined Probability of Exclusion/Inclusions (CPE/CPI)	Likelihood Ratio (LR)
Random Match Probability (RMP)	Other:
Please note: Any additional formatting applied in the free form space below will not transfer to the Summ to be illegible. This includes additional spacing and returns that present your responses in lists and tabular for	
4) Please list any databases used in the statistical analyses of Item 3 below.	

Part I: DNA ANALYSIS (continued)

STR & Amelogenin Results for Questioned Item 4

- Report alleles in numerical order, separated by a comma.
- Follow your laboratory procedures for reporting homozygotes (i.e. X,X or X) and null responses.
 For each locus, if a major and minor contributor can be distinguished and your laboratory normally reports this distinction, record the results in the appropriately labeled response boxes.

abb. ab					
STR Amplification Kit Used	For Item 4:	Please indicate the electropherogram(s) reviewed for this test.			
□GlobalFiler™	Investigator® 24plex	PowerPlex® Fusion 5C	PowerPlex® Fusion 6C		
HID format	PDF format	FSA format			
Report the Probabilistic Genor	typing Software Used (if applica	ble):			

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

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

YSTR Kes	uits for Questioned Item 4			
YSTR Amplificat	tion Kit Used For Item 4:	Please indicate the electroph	nerogram(s) reviewed for this te	st.
■YFiler™	PowerPlex® Y23	FSA format	HID format	PDF format

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

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

Part I: DNA ANALYSIS (continued) Item 4 DNA Analysis Questions	
1) Record the number of contributors found in the Item 4 DNA profile:	
2) Choose the conclusion statement that best describes the results of the an with the Known Items (If the wording below differs from the normal wording conclusions as best you can and use your preferred wording in the Additional Item 1 Conclusion	g of your conclusions, adapt these
Item 1 (victim) is included (cannot be excluded) as a possible contributor to the Di	NA obtained from Item 4.
Item 1 (victim) is excluded as a possible contributor to the DNA obtained from Iter	m 4.
The DNA typing results for Item 4 in comparison with Item 1 are inconconclusive/u	ıninterpretable.
Item 2 Conclusion	
$\hfill \bigcirc$ Item 2 (suspect) is included (cannot be excluded) as a possible contributor to the I	DNA obtained from Item 4.
\bigcirc Item 2 (suspect) is excluded as a possible contributor to the DNA obtained from Ite	em 4.
\odot The DNA typing results for Item 4 in comparison with Item 2 are inconconclusive/u	ıninterpretable.
3) Statistical Analysis of Item 4 DNA Typing Results: Select the statistical method(s) used by marking the associated box and rep	port these results in the space below:
Combined Probability of Exclusion/Inclusions (CPE/CPI)	Likelihood Ratio (LR)
Random Match Probability (RMP)	Other:
Please note: Any additional formatting applied in the free form space below will not transfer to be illegible. This includes additional spacing and returns that present your responses in lists an	to the Summary Report and may cause your information nd tabular formats.
4) Please list any databases used in the statistical analyses of Item 4 below.	

Part II: ADDITIONAL COMMENTS Comments regarding any part of this Test.

Part III: AMPLIFICATION KIT SURVEY (optional) To accommodate your laboratory's future needs, please list all PCR amplification kits (Autosomal and YSTR) utilized as well as any future kits to be implemented in your laboratory.	

RELEASE OF DATA TO ACCREDITATION BODIES

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

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

This participant's data is intended for submission to ASCLD/LAB, ANAB, and/or A2LA. (Accreditation Release section below must be completed.)

This participant's data is not intended for submission to ASCLD/LAB, ANAB, and/or A2LA.

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

Step 1: Prov	vide the applicable Accreditation Certificate Number(s) for your laboratory					
	ANAB Certificate No. (Include ASCLD/LAB Certificate here) A2LA Certificate No.					
Step 2: Com	plete the Laboratory Identifying Information in its entirety					
	Authorized Contact Person and Title					
	Laboratory Name					
	Location (City/State)					