



DNA Interpretation Test No. 14-589 Summary Report

This proficiency test was sent to 26 participants. Each participant received a sample pack consisting of a DVD containing electropherograms which they were requested to evaluate using their existing protocols. Data were returned from 19 participants (73% response rate) and are compiled into the following tables:

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

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

Manufacturer's Information

Each sample pack contained digital images and fsa files consisting of electropherograms for 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, Items 2 and 3 were created using blood from the same male donor different from the source of Item 1. The Item 4 mixture was created by combining two parts of blood from the Item 1 male donor (major) and one part of blood from the Item 2 male donor (minor).

SAMPLE SET ASSEMBLY: Once sample preparation and verification was completed, each DVD was checked to ensure all images were accessible.

VERIFICATION: Laboratories that conducted predistribution evaluations of the electropherograms reported consistent results and associations.

<i>Amelogenin and STR Results</i>						
Results compiled by predistribution laboratories and a consensus of participants.						
Item	D2S1338 D16S539 FGA	D3S1358 D18S51 PentaD	D5S818 D19S433 PentaE	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
1	17,23 10,11 20,26	14,16 12,20 *	11,13 12,13 *	11,13 28,28 7,8	13,14 X,Y 8,11	12,12 11,11 17,17
2	17,25 12,13 20,21	16,17 18,20 *	12,12 13,15 *	8,12 30,32.2 7,8	10,13 X,Y 8,8	10,14 9,11 14,20
3	17,25 12,13 20,21	16,17 18,20 *	12,12 13,15 *	8,12 30,32.2 7,8	10,13 X,Y 8,8	10,14 9,11 14,20
4 Major	17,23 10,11 20,26	14,16 12,20 *	11,13 12,13 *	11,13 28,28 7,8	13,14 X,Y 8,11	12,12 11,11 17,17
4 Minor	17,25 12,13 20,21	16,17 18,20 *	12,12 13,15 *	8,12 30,32.2 7,8	10,13 X,Y 8,8	10,14 9,11 14,20

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

Manufacturer's Information (Continued)

YSTR Results								
<i>Results compiled from predistribution laboratories and a consensus of participants.</i>								
Item	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4		
1	15	15,16	13	30	22	10	11	14
	14	11	12	21	15	17	*	*
	*	*	*	24	*	11		
2	14	11,15	13	29	23	10	13	13
	15	13	11	19	15	16	*	*
	*	*	*	24	*	13		
3	14	11,15	13	29	23	10	13	13
	15	13	11	19	15	16	*	*
	*	*	*	24	*	13		
4 Major	15	15,16	13	30	22	10	11	14
	14	11	12	21	15	17	*	*
	*	*	*	24	*	11		
4 Minor	14	11,15	13	29	23	10	13	13
	15	13	11	19	15	16	*	*
	*	*	*	24	*	13		

* Typically results from at least 10 participants must be received to form a consensus, however, in this case only 8 participants returned YSTR results. The above YSTR results represent the consensus among these participants. An asterisk indicates that less than 8 participants reported results for that locus.

Summary Comments

This test was designed to allow participants to assess their proficiency in evaluating electropherogram(s) and interpreting data. Each participant received electropherograms (in both FSA and PDF formats) of four items including the following kits: Identifiler Plus, Powerplex 16HS, Yfiler, Powerplex Y23.

Of the 19 participants that reported results, all excluded the victim (Item 1) and included the suspect (Item 2) as a possible contributor to the Item 3 profile and all included the victim (Item 1) and the suspect (Item 2) as possible contributors to the Item 4 mixture.

All participants reported consistent allelic results for Items 1 - 3. Eighteen participants reported consistent STR allelic results for the Item 4 mixture and one participant was missing alleles at multiple loci. There were four participants, including a participant that also reported the unseparated Item 4 mixture profile, that separated the Item 4 mixture into major and minor components. Three of the four participants reported consistent results and one was missing alleles at multiple loci. Eight participants reported consistent YSTR allelic results and one participant separated the Item 4 mixture into major and minor components. The major and minor components were consistent with the YSTR alleles found in the Item 4 mixture. Eighteen participants reported that there was one contributor to Item 3 and one participant reported that there was at least one. Fourteen participants reported that there were two contributors to the Item 4 mixture and four reported that there were at least two contributors.

Interpretation Guidelines

TABLE 1

WebCode	Analytical Threshold	Peak Height Ratio	Stochastic Threshold
3HV9JE	50rfu	60%	150rfu
63EW7B	50 rfu	60%	150 rfu
67E3LG	50 rfu	60%	150 rfu
9PY7UD	84 rfu	60%	340 rfu
BV2UM6	50rfu	0.38 (50-300rfu); 0.54(301-1000 rfu); 0.63 (1001-8000rfu)	200rfu
CNTPAC	75 RFU	60	200 RFU
DUWD34	50 RFU	60%	200 RFU
GADHZ8	50 RFU	50 %	150 RFU
GZ9BK8	200 + confirmed, 30 - 200 requires duplication	50%	200
J9UG74	100 RFU	50%	425 RFU
JRAP86	50 RFU	60%	150 RFU
MHDQ9V	Identifiler Plus 75 rfu, PPY 23 75 rfu	Identifiler Plus 40% (reference sample)	Identifiler 150 rfu, PPY23 250 rfu (DYS385 a/b locus)
N6WLAX	110	60	410
NFGVYR	50 rfu	60%	150 rfu
QTPCZ8	AT:35 RFU	150-699: 30%, 700->: 60%	ST: 150 RFU
TKZGVU	[See Table 9: Additional Comments]	[See Table 9: Additional Comments]	[See Table 9: Additional Comments]
UDWUHK	Identifiler Plus 75 rfus, PowerPlex Y23 75 rfus	Identifiler Plus 40% (Reference samples)	Identifiler Plus 150 rfus, PowerPlex Y23 250 rfus (DYS385 a/b loc
UQAQ63	50 rfu (*See Part II[Table 9: Additional Comments])	60% (*See Part II[Table 9: Additional Comments])	150 rfu (*See Part II[Table 9: Additional Comments])
YHXNKW	50	60%	150

STR & Amelogenin Results

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
					Item 1		
3HV9JE	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26	NA	NA	7,8	8,11	17,17
63EW7B	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26			7,8	8,11	17,17
67E3LG	PowerPlex® 16				FSA Format, PDF Format		
	1		14,16	11,13	11,13	13,14	12
		10,11	12,20		28	X,Y	11
		20,26	5,9	7,8	7,8	8,11	17
9PY7UD	Identifiler® Plus				FSA Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26	-	-	7,8	8,11	17,17
BV2UM6	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26			7,8	8,11	17,17
CNTPAC	PowerPlex® 16				PDF Format		
	1		14,16	11,13	11,13	13,14	12
		10,11	12,20		28	X,Y	11
		20,26	5,9	7,8	7,8	8,11	17
DUWD34	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12
		10,11	12,20	12,13	28	X,Y	11
		20,26			7,8	8,11	17
GADHZ8	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12
		10,11	12,20	12,13	28	X,Y	11
		20,26			7,8	8,11	17

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
					Item 1		
GZ9BK8	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26			7,8	8,11	17,17
J9UG74					PDF Format		
	1		14,16	11,13	11,13	13,14	12
		10,11	12,20		28	X,Y	11
		20,26	5,9	7,8	7,8	8,11	17
JRAP86	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12
		10,11	12,20	12,13	28	X,Y	11
		20,26			7,8	8,11	17
MHDQ9V	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26	n/a	n/a	7,8	8,11	17,17
N6WLAX	Identifiler® Plus				FSA Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26			7,8	8,11	17,17
NFGVYR	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26	-	-	7,8	8,11	17,17
QTPCZ8	Identifiler® Plus				FSA Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26			7,8	8,11	17,17
TKZGVU	Identifiler® Plus, PowerPlex®16				FSA Format		
	1	17,23	14,16	11,13	11,13	13,14	12
		10,11	12,20	12,13	28	X,Y	11
		20,26	5,9	7,8	7,8	8,11	17
UDWUHK	Identifiler® Plus, PowerPlex®16				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26	5,9	7,8	7,8	8,11	17,17

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
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Item 1

UQAQ63	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12
		10,11	12,20	12,13	28	X,Y	11
		20,26			7,8	8,11	17
YHXNKW	Identifiler® Plus				PDF Format		
	1	17,23	14,16	11,13	11,13	13,14	12
		10,11	12,20	12,13	28	X,Y	11
		20,26			7,8	8,11	17

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
Item 2							
3HV9JE	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	NA	NA	7,8	8,8	14,20
63EW7B	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20
67E3LG	PowerPlex® 16				FSA Format, PDF Format		
	2		16,17	12	8,12	10,13	10,14
		12,13	18,20		30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8	14,20
9PY7UD	Identifiler® Plus				FSA Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	-	-	7,8	8,8	14,20
BV2UM6	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20
CNTPAC	PowerPlex® 16				PDF Format		
	2		16,17	12	8,12	10,13	10,14
		12,13	18,20		30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8	14,20
DUWD34	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8	14,20
GADHZ8	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8	14,20
GZ9BK8	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
Item 2							
J9UG74					PDF Format		
	2		16,17	12	8,12	10,13	10,14
		12,13	18,20		30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8	14,20
JRAP86	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8	14,20
MHDQ9V	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	n/a	n/a	7,8	8,8	14,20
N6WLAX	Identifiler® Plus				FSA Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20
NFGVYR	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	-	-	7,8	8,8	14,20
QTPCZ8	Identifiler® Plus				FSA Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20
TKZGVU	Identifiler® Plus, PowerPlex®16				FSA Format		
	2	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8	14,20
UDWUHK	Identifiler® Plus, PowerPlex®16				PDF Format		
	2	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8,8	14,20
UQAQ63	Identifiler® Plus				PDF Format		
	2	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8	14,20

TABLE 2

WebCode	Item	D2S1338	D3S1358	D5S818	D7S820	D8S1179	D13S317
		D16S539	D18S51	D19S433	D21S11	Amelogenin	CSF1PO
		FGA	Penta D	Penta E	TH01	TPOX	vWA

Item 2

YHXNKW	Identifiler® Plus				PDF Format		
2	17,25	16,17	12	8,12	10,13	10,14	
	12,13	18,20	13,15	30,32.2	X,Y	9,11	
	20,21			7,8	8	14,20	

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
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Item 3

3HV9JE	Identifiler® Plus						
					PDF Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	NA	NA	7,8	8,8	14,20
63EW7B	Identifiler® Plus						
					PDF Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20
67E3LG	PowerPlex® 16						
					FSA Format, PDF Format		
	3		16,17	12	8,12	10,13	10,14
		12,13	18,20		30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8	14,20
9PY7UD	Identifiler® Plus						
					FSA Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	-	-	7,8	8,8	14,20
BV2UM6	Identifiler® Plus						
					PDF Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20
CNTPAC	PowerPlex® 16						
					PDF Format		
	3		16,17	12	8,12	10,13	10,14
		12,13	18,20		30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8	14,20
DUWD34	Identifiler® Plus						
					PDF Format		
	3	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8	14,20
GADHZ8	Identifiler® Plus						
					PDF Format		
	3	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8	14,20
GZ9BK8	Identifiler® Plus						
					PDF Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
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Item 3

J9UG74					PDF Format		
	3		16,17	12	8,12	10,13	10,14
		12,13	18,20		30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8	14,20
JRAP86	Identifiler® Plus				PDF Format		
	3	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8	14,20
MHDQ9V	Identifiler® Plus				PDF Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	n/a	n/a	7,8	8,8	14,20
N6WLAX	Identifiler® Plus				FSA Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20
NFGVYR	Identifiler® Plus				PDF Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	-	-	7,8	8,8	14,20
QTPCZ8	Identifiler® Plus				FSA Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8,8	14,20
TKZGVU	Identifiler® Plus, PowerPlex®16				FSA Format		
	3	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8	14,20
UDWUHK	Identifiler® Plus, PowerPlex®16				PDF Format		
	3	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	9,12	7,11	7,8	8,8	14,20
UQAQ63	Identifiler® Plus				PDF Format		
	3	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8	14,20

TABLE 2

WebCode	Item	D2S1338	D3S1358	D5S818	D7S820	D8S1179	D13S317
		D16S539	D18S51	D19S433	D21S11	Amelogenin	CSF1PO
		FGA	Penta D	Penta E	TH01	TPOX	vWA

Item 3

YHXNKW	Identifiler® Plus				PDF Format		
3	17,25	16,17	12	8,12	10,13	10,14	
	12,13	18,20	13,15	30,32.2	X,Y	9,11	
	20,21			7,8	8	14,20	

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
Item 4							
3HV9JE	Identifiler® Plus						
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26	NA	NA	7,8	8,11	14,17,20
63EW7B	Identifiler® Plus						
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26			7,8	8,11	14,17,20
67E3LG	PowerPlex®16						
	4		14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20		28,30,32.2	X,Y	9,11
		20,21,26	5,9,12	7,8,11	7,8	8,11	14,17,20
9PY7UD	Identifiler® Plus						
	4	17,23,(25)	14,16,(17)	11,12,13	(8),11,12,13	(10),13,14	(10),12,12,(14)
		10,11,12,13	12,18,20	12,13,15	28,28,(30),(32.2)	X,Y	(9),11,11
		20,21,26	-	-	7,8	8,11	(14),17,17,(20)
BV2UM6	Identifiler® Plus						
	4			11,12,13	8,11,12,13		
		10,11,12,13			28,30,32.2		
						8,11	
CNTPAC	PowerPlex®16						
	4		14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20		28,30,32.2	X,Y	9,11
		20,21,26	5,9,12	7,8,11	7,8	8,11	14,17,20
DUWD34	Identifiler® Plus						
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26			7,8	8,11	14,17,20
GADHZ8	Identifiler® Plus						
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26			7,8	8,11	14,17,20
GZ9BK8	Identifiler® Plus						
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26			7,8	8,11	14,17,20

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
Item 4							
J9UG74					PDF Format		
	4		14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20		28,30,32.2	X,Y	9,11
		20,21,26	5,9,12	7,8,11	7,8	8,11	14,17,20
JRAP86	Identifiler® Plus				PDF Format		
	4	17,(23),(25)	14,16,(17)	11,12,13	(8),11,12,13	(10),13,(14)	(10),12,(14)
		10,11,12,13	12,18,20	12,13,(15)	28,(30),(32.2)	X,Y	(9),11
		20,21,26			7,8	8,(11)	(14),17,(20)
MHDQ9V	Identifiler® Plus				PDF Format		
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26	n/a	n/a	7,8	8,11	14,17,20
N6WLAX	Identifiler® Plus				FSA Format		
	4	17,23,(25)	14,16,(17)	11,12,13	(8),11,12,13	(10),13,14	(10),12,(14)
		10,11,12,13	12,18,20	12,13,15	28,(30),(32.2)	X,Y	(9),11,11
		20,21,26			7,8	8,11	(14),17,17,(20)
NFGVYR	Identifiler® Plus				PDF Format		
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26	-	-	7,8	8,11	14,17,20
QTPCZ8	Identifiler® Plus				FSA Format		
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26			7,8	8,11	14,17,20
TKZGVU	Identifiler® Plus, PowerPlex®16				FSA Format		
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26	5,9,12	7,8,11	7,8	8,11	14,17,20
UDWUHK	Identifiler® Plus, PowerPlex®16				PDF Format		
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26	5,9,12	7,8,11	7,8	8,11	14,17,20
UQAQ63	Identifiler® Plus				PDF Format		
	4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14
		10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11
		20,21,26			7,8	8,11	14,17,20

TABLE 2

WebCode	Item	D2S1338	D3S1358	D5S818	D7S820	D8S1179	D13S317
		D16S539	D18S51	D19S433	D21S11	Amelogenin	CSF1PO
		FGA	Penta D	Penta E	TH01	TPOX	vWA

Item 4

YHXNKW	Identifiler® Plus				PDF Format		
4	17,23,25	14,16,17	11,12,13	8,11,12,13	10,13,14	10,12,14	
	10,11,12,13	12,18,20	12,13,15	28,30,32.2	X,Y	9,11	
	20,21,26			7,8	8,11	14,17,20	

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
Item 4major							
BV2UM6	Identifiler® Plus						
	4major	17,23	14,16 12,20	12,13		13,14 X,Y	12,12 11,11
		20,26			7,8		17,17
GADHZ8	Identifiler® Plus						
	4major	17,23	14,16	11,13	11,13	13,14	12
		10,11	12,20	12,13	28	X,Y	11
		20,26					17
JRAP86	Identifiler® Plus						
	4major	17,23	14,16	11,13	11,13	13,14	12
		10,11	12,20	12,13	28	X,Y	11
		20,26			7,8	8,11	17
NFGVYR	Identifiler® Plus				PDF Format		
	4major	17,23	14,16	11,13	11,13	13,14	12,12
		10,11	12,20	12,13	28,28	X,Y	11,11
		20,26	-	-	7,8	8,11	17,17

TABLE 2

WebCode	Item	D2S1338 D16S539 FGA	D3S1358 D18S51 Penta D	D5S818 D19S433 Penta E	D7S820 D21S11 TH01	D8S1179 Amelogenin TPOX	D13S317 CSF1PO vWA
Item 4minor							
BV2UM6	Identifiler® Plus						
	4minor	17,25	16,17			10,13	10,14
			18	15			9
		21					14,20
GADHZ8	Identifiler® Plus						
	4minor	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21					14,20
JRAP86	Identifiler® Plus						
	4minor	17,25	16,17	12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21			7,8	8	14,20
NFGVYR	Identifiler® Plus				PDF Format		
	4minor	17,25	16,17	12,12	8,12	10,13	10,14
		12,13	18,20	13,15	30,32.2	X,Y	9,11
		20,21	-	-	7,8	8,8	14,20

See Additional Comments (Table 9) for laboratory specific notations.

YSTR Results

TABLE 3

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

Item 1

CNTPAC	PowerPlex®Y23	PDF Format								
		1	15	15,16	13	30	22	10	11	14
			14	11	12	21	15	17	26	12
		11	18	18	24	13	11			
GADHZ8	YFiler®	PDF Format								
		1	15	15,16	13	30	22	10	11	14
			14	11	12	21	15	17		
					24		11			
GZ9BK8	YFiler®	PDF Format								
		1	15	15,16	13	30	22	10	11	14
			14	11	12	21	15	17		
					24		11			
MHDQ9V	PowerPlex®Y23	PDF Format								
		1	15	15,16	13	30	22	10	11	14
			14	11	12	21	15	17	26	12
		11	18	18	24	13	11			
NFGVYR	YFiler®	PDF Format								
		1	15	15,16	13	30	22	10	11	14
			14	11	12	21	15	17	-	-
		-	-	-	24	-	11			
TKZGVU	YFiler®, PowerPlex®Y23	FSA Format								
		1	15	15,16	13	30	22	10	11	14
			14	11	12	21	15	17	26	12
		11	18	18	24	13	11			
UDWUHK	PowerPlex®Y23	PDF Format								
		1	15	15,16	13	30	22	10	11	14
			14	11	12	21	15	17	26	12
		11	18	18	24	13	11			
UQAQ63	YFiler®	PDF Format								
		1	15	15,16	13	30	22	10	11	14
			14	11	12	21	15	17		
					24		11			

TABLE 3

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

Item 2

CNTPAC	PowerPlex®Y23	PDF Format								
		2	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	21	13
		12	18	17	24	10	13			
GADHZ8	YFiler®	PDF Format								
		2	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16		
					24		13			
GZ9BK8	YFiler®	PDF Format								
		2	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16		
					24		13			
MHDQ9V	PowerPlex®Y23	PDF Format								
		2	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	21	13
		12	18	17	24	10	13			
NFGVYR	YFiler®	PDF Format								
		2	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	-	-
		-	-	-	24	-	13			
TKZGVU	YFiler®, PowerPlex®Y23	FSA Format								
		2	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	21	13
		12	18	17	24	10	13			
UDWUHK	PowerPlex®Y23	PDF Format								
		2	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	21	13
		12	18	17	24	10	13			
UQAQ63	YFiler®	PDF Format								
		2	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16		
					24		13			

TABLE 3

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

Item 3

CNTPAC	PowerPlex®Y23	PDF Format								
		3	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	21	13
		12	18	17	24	10	13			
GADHZ8	YFiler®	PDF Format								
		3	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16		
					24		13			
GZ9BK8	YFiler®	PDF Format								
		3	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16		
					24		13			
MHDQ9V	PowerPlex®Y23	PDF Format								
		3	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	21	13
		12	18	17	24	10	13			
NFGVYR	YFiler®	PDF Format								
		3	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	-	-
		-	-	-	24	-	13			
TKZGVU	YFiler®, PowerPlex®Y23	FSA Format								
		3	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	21	13
		12	18	17	24	10	13			
UDWUHK	PowerPlex®Y23	PDF Format								
		3	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16	21	13
		12	18	17	24	10	13			
UQAQ63	YFiler®	PDF Format								
		3	14	11,15	13	29	23	10	13	13
			15	13	11	19	15	16		
					24		13			

TABLE 3

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

Item 4

CNTPAC	PowerPlex®Y23	PDF Format								
		4	14,15	11,15,16	13	29,30	22,23	10	11,13	13,14
			14,15	11,13	11,12	19,21	15	16,17	21,26	12,13
		11,12	18	17,18	24	10,13	11,13			
GADHZ8	YFiler®	PDF Format								
		4	14,15	11,15,16	13	29,30	22,23	10	11,13	13,14
			14,15	11,13	11,12	19,21	15	16,17		
					24		11,13			
GZ9BK8	YFiler®	PDF Format								
		4	14,15	11,15,16	13	29,30	22,23	10	11,13	13,14
			14,15	11,13	11,12	19,21	15	16,17		
					24		11,13			
MHDQ9V	PowerPlex®Y23	PDF Format								
		4	14,15	11,15,16	13	29,30	22,23	10	11,13	13,14
			14,15	11,13	11,12	19,21	15	16,17	21,26	12,13
		11,12	18	17,18	24	10,13	11,13			
NFGVYR	YFiler®	PDF Format								
		4	14,15	11,15,16	13	29,30	22,23	10	11,13	13,14
			14,15	11,13	11,12	19,21	15	16,17	-	-
		-	-	-	24	-	11,13			
TKZGVU	YFiler®, PowerPlex®Y23	FSA Format								
		4	14,15	11,15,16	13	29,30	22,23	10	11,13	13,14
			14,15	11,13	11,12	19,21	15	16,17	21,26	12,13
		11,12	18	17,18	24	10,13	11,13			
UDWUHK	PowerPlex®Y23	PDF Format								
		4	14,15	11,15,16	13	29,30	22,23	10	11,13	13,14
			14,15	11,13	11,12	19,21	15	16,17	21,26	12,13
		11,12	18	17,18	24	10,13	11,13			
UQAQ63	YFiler®	PDF Format								
		4	14,15	11,15,16	13	29,30	22,23	10	11,13	13,14
			14,15	11,13	11,12	19,21	15	16,17		
					24		11,13			

TABLE 3

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

Item 4major

NFGVYR	YFiler®	PDF Format							
	4major	15	15,16	13	30	22	10	11	14
		14	11	12	21	15	17	-	-
		-	-	-	24	-	11		

TABLE 3

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

Item 4minor

NFGVYR	YFiler®	PDF Format							
	4minor	14	11,15	13	29	23	10	13	13
		15	13	11	19	15	16	-	-
		-	-	-	24	-	13		

DNA Analysis

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

WebCode	Item 3 Conclusion			Item 4 Conclusion		
	# of Contributors	Item 1	Item 2	# of Contributors	Item 1	Item 2
3HV9JE	One	Excluded	Included	Two	Included	Included
63EW7B	1	Excluded	Included	2	Included	Included
67E3LG	one	Excluded	Included	two	Included	Included
9PY7UD	One	Excluded	Included	TWO	Included	Included
BV2UM6	1	Excluded	Included	2	Included	Included
CNTPAC	1	Excluded	Included	at least 2	Included	Included
DUWD34	1	Excluded	Included	2	Included	Included
GADHZ8	1	Excluded	Included	2	Included	Included
GZ9BK8	1	Excluded	Included	2	Included	Included
J9UG74	1	Excluded	Included	2	Included	Included
JRAP86	1	Excluded	Included	2	Included	Included
MHDQ9V	at least one	Excluded	Included	at least two	Included	Included
N6WLAX	1	Excluded	Included	2	Included	Included
NFGVYR	1	Excluded	Included	2	Included	Included
QTPCZ8	1	Excluded	Included	2	Included	Included
TKZGVU	1	Excluded	Included	2	Included	Included
UDWUHK	one	Excluded	Included	at least 2	Included	Included
UQAQ63	1	Excluded	Included	> or =2	Included	Included
YHXNKW	1	Excluded	Included	2	Included	Included

Response Summary			Participants reporting conclusions: 19			
<i>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?</i>						
Responses		<u>Item 3</u>		<u>Item 4</u>		
		<u>Item 1</u>	<u>Item 2</u>	<u>Item 1</u>	<u>Item 2</u>	
	Included	0	19	19	19	
Excluded	19	0	0	0		
Inconclusive	0	0	0	0		

Statistical Analysis of Item 3

TABLE 5

WebCode	Statistical Analysis of Item 3
3HV9JE	<p>Likelihood Ratio</p> <p>Actual likelihood ratio for this profile not calculated given it is a full single DNA profile. Laboratory procedures[sic] would be to report a conservative value of one in a billion (although actual likelihood ratio is expected to be significantly greater). Reported as follows: The components of the DNA profile obtained from item 3 are the same as those obtained from the reference profile of the suspect (item 2). The chance of obtaining these matching DNA profiles if the DNA originated from some unrelated individual chosen at random from the population is in the order of one in a billion (a thousand million).</p>
67E3LG	<p>Random Match Probability</p> <p>The Random Match Probability of Item 3 DNA typing results is approximately 1 in 1.2E+23.</p>
9PY7UD	<p>Random Match Probability</p> <p>The probability of another person, selected at random from the Chinese, Malay or Indian population, having the same DNA profile, is estimated to be 1 in 1.0E+23, 1 in 2.5E+23 or 1 in 2.8E+23 respectively.</p>
BV2UM6	<p>Random Match Probability</p> <p>1 in 14 sextillion (14x10E21)</p>
CNTPAC	<p>Random Match Probability, Y-STR counting method</p> <p>STR's Theta = 0.03 {Caucasian Americans: 1 in 3.48 X 10²¹ (sextillion), African Americans: 1 in 1.05 x 10²⁴ (Septillion), Hispanic Americans: 1 in 2.22 x10²⁴ (septillion).} Y-STR's Theta = 0.00002 all but native Americans (0.00030) {Caucasian Americans: 1 in 494, African Americans: 1 in 433, Hispanic Americans: 1 in 318, Asian Americans: 1 in 217, Native Americans: 1 in 295}.</p>
DUWD34	<p>Random Match Probability</p> <p>The probability of observing the genetic profile represented in Item 3 is estimated to be one in 270 sextillion African Americans, one in 4.5 sextillion Caucasians, and one in 340 sextillion Hispanics.</p>
GADHZ8	<p>Random Match Probability</p> <p>RMP of STR : 3.57E-24. RMP of YSTR:1.78E-2</p>
GZ9BK8	<p>Random Match Probability, Y-HRD</p> <p>Y STR - No matches in 84256 Haplotype or Y HRD database. Identifiler[sic]+ -The chance of obtaining this DNA profile if the DNA has originated from someone who is unrelated to suspect is in the order of one in one billion (one thousand million).</p>
J9UG74	<p>Random Match Probability</p> <p>Using recommendation 4.1 from the 1996 National Research Council report, the frequency in the combined population of the profile obtained from item 3 and the suspect (item 2) is approximately 1 in 16 sextillion unrelated individuals.</p>
JRAP86	<p>Random Match Probability</p> <p>1 in 12 quintillion. Used most conservative among all populations in the database</p>
N6WLAX	<p>Random Match Probability</p> <p>The probability of another person, selected at random from the Chinese, Malay or Indian population, having the same DNA profile, is estimated to be 1 in 100 sextillion (1.0E23), 1 in 250 sextillion (2.5E23) or 1 in 280 sextillion (2.8E23) respectively.</p>
NFGVYR	<p>Likelihood Ratio, Random Match Probability</p>

TABLE 5

WebCode	Statistical Analysis of Item 3
	African American = 2.79×10^{-21} (RMP), = 1 in 3.59×10^{20} (LH). Caucasian = 1.01×10^{-20} (RMP), = 1 in 9.86×10^{19} (LH). Hispanic = 6.43×10^{-20} (RMP), = 1 in 1.56×10^{19} (LH).
QTPCZ8	Random Match Probability The estimated probability of selecting an unrelated individual at random from the U.S. population with a matching profile is 1 in 4.5 sextillion. Statistical calculations were computed by CODIS Popstats using frequency data compiled by the FBI and published in the Journal of Forensic Sciences 46 (3) (2001) 453-489 and Forensic Science Communications 3 (3) (2001) (for D2S1338 and D19S433).
TKZGVU	Random Match Probability MP = 4.85984×10^{-25}
UDWUHK	No statistical calculations performed
UQAQ63	Random Match Probability RMP = approximately 1 in 128 quintillion.
YHXNKW	Random Match Probability CAUC: 1 in 4 Sextillion, AA: 1 in 200 Sextillion, SHE: 1 in 40 Quintillion, SWH: 1 in 300 Sextillion.

Statistical Analysis of Item 4

TABLE 6

WebCode	Statistical Analysis for Item 4
3HV9JE	<p>Likelihood Ratio</p> <p>In my opinion this DNA profile has originated from two individuals. The DNA sample from item 4 was collected from the suspect's item of clothing and the components of the suspect's reference profile are fully represented in this mixture. It is therefore reasonable to assume that the suspect is the source of some of these components and a likelihood ratio has been calculated using the remaining components, all of which are the same as the victim's DNA profile. The likelihood ratio that was calculated was in excess of the maximum value recommended in laboratory procedures of one in a billion (as described in part 3 of Table 5) of item 3).</p>
67E3LG	<p>Likelihood Ratio</p> <p>LR = 1.5E+11 - The DNA findings provide extremely strong evidence to support the hypothesis that the victim and an unrelated unknown person were the contributors compared to the alternative hypothesis that two unrelated unknown persons were the contributors. LR = 8.8E+10 - The DNA findings provide extremely strong evidence to support the hypothesis that the suspect and an unrelated unknown person were the contributors compared to the alternative hypothesis that two unrelated unknown persons were the contributors.</p>
9PY7UD	<p>Combined Probability of Exclusion/Inclusion</p> <p>The proportion of the Chinese, Malay or Indian population whose individual DNA profiles can be included as contributors of the mixed DNA profile is estimated to be 5.43E-12, 1.93E-11 or 1.02E-11 respectively.</p>
BV2UM6	<p>Combined Probability of Exclusion/Inclusion, Random Match Probability</p> <p>Item 1 (victim) matches the major contributor (RMP = 43x10E12 or 1 in 43 trillion). Item 2 (suspect) cannot be excluded from the mixture (CPI = 9x10E9 or 1 in 9 billion)</p>
CNTPAC	<p>Combined Probability of Exclusion/Inclusion</p> <p>Caucasian Americans: CPE = 99.999999844%; CPI = 1 in 6.41 x 10⁹ (billion), African Americans: CPE = 99.9999999395%; CPI = 1 in 1.65 x 10¹¹ (165 billion). Hispanic Americans: CPE = 99.9999999782%; CPI = 1 in 4.59 x 10¹⁰ (45.9 billion), No Y-STR mixture formula avail.</p>
DUWD34	<p>Combined Probability of Exclusion/Inclusion</p> <p>The probability of encountering an individual whose genetic profile is included among the combination of possible profiles defined by the mixture in Item 4 is estimated to be one in 30 billion African Americans, one in 3.7 billion Caucasians, and one in 39 billion Hispanics.</p>
GADHZ8	<p>Random Match Probability</p> <p>After Item 2 (suspect) DNA-STR profile has been subtracted out, the remaining DNA-STR profile of Item 4 is consistent with DNA-STR profile of Item 1, which is the major contributor. The RMP of STR is 4.27E-22. According to the interpretation guidelines implemented in our laboratory, statistical analysis of Y-STR profile of mixture is not provided. According to Y-STR typing result, both the victim (Item 1) and the suspect (Item 2) are possible DNA contributors attributed to Item 4.</p>
GZ9BK8	<p>Likelihood Ratio</p> <p>No means of Artistically evaluating Y filters mixture - Identifiler plus is not our routine system and we have no system in place to carry out a mixture calculation using old results in this DNA profile. Using SGM + loci would report as in the order of one billion times more likely if DNA is from suspect and victim rather than from two unknown and unrelated individuals.</p>

TABLE 6

WebCode	Statistical Analysis for Item 4
J9UG74	<p>Likelihood Ratio</p> <p>The probability of the DNA profile is approximately 140 quadrillion times more likely if it originated from the suspect and the victim than from the suspect and an unknown individual in the combined population.</p>
JRAP86	<p>Random Match Probability</p> <p>1 in 57 quadrillion. Used most conservative among all populations in database</p>
N6WLAX	<p>Combined Probability of Exclusion/Inclusion</p> <p>The proportion of the Chinese, Malay or Indian population whose individual DNA profiles can be included as contributors of the mixed DNA profile is estimated to be 5.4E-12, 1.9E-11 or 1.0E-11 respectively.</p>
NFGVYR	<p>Likelihood Ratio, Random Match Probability</p> <p>African American (minor) = 2.79×10^{-21} (RMP)/1 in 3.59×10^{20} (LH); Caucasian (minor) = 1.01×10^{-20} (RMP)/1 in 9.86×10^{19} (LH); Hispanic (minor) = 6.43×10^{-20} (RMP)/1 in 1.56×10^{19} (LH); African American (Major) = 3.73×10^{-17} (RMP)/ 1 in 2.68×10^{16} (LH); Caucasian (Major) = 8.43×10^{-19} (RMP)/ 1 in 1.19×10^{18} (LH); Hispanic (Major) = 1.11×10^{-18} (RMP)/ 1 in 8.99×10^{17} (LH)</p>
QTPCZ8	<p>Likelihood Ratio</p> <p>It is 13 quadrillion times more likely that the observed DNA profile occurred as a result of a mixture of the (victim) and (suspect) than it having originated from the (suspect) and an unrelated individual selected at random from the U.S. population. Statistical calculations were computed by CODIS Popstats using frequency data compiled by the FBI and published in the Journal of Forensic Sciences 46 (3) (2001) 453-489 and Forensic Science Communications 3 (3) (2001) (for D2S1338 and D19S433).</p>
TKZGVU	<p>Likelihood Ratio</p> <p>LR = 2.69432e+021</p>
UDWUHK	<p>No statistical calculations were performed.</p>
UQAQ63	<p>Likelihood Ratio</p> <p>The LR was approx. 2.42 quadrillion in one, which means the DNA findings were about 2.42 quadrillion times more probable if (Pros. Hypo.) the Victim and the Suspect were the contributors, than if (Def. Hypo.) the Suspect and an unrelated, random person from the local [country] population were the contributors.</p>
YHXNKW	<p>Combined Probability of Exclusion/Inclusion</p> <p>CAUC: 1 in 3 billion, AA: 1 in 30 billion, SHE: 1 in 300 million, SWH: 1 in 30 billion</p>

Databases Used

TABLE 7

WebCode	Database Used
3HV9JE	Item 3: [Participant referenced a country-specific population database] Item 4: See part 4[Table 7] of item 3.
67E3LG	Item 3: [Participant referenced a country-specific population database] Item 4: [Participant referenced a country-specific population database]
9PY7UD	Item 3: [Participant referenced country-specific population databases] Item 4: [Participant referenced country-specific population databases]
BV2UM6	Item 3: AmpflSTR Identifiler Plus (U.S. Caucasian) Item 4: AmpflSTR Identifiler Plus (U.S. Caucasian)
CNTPAC	Item 3: Promega Allele frequencies for autosomal STR's plus; US Y-STR database (www.usystrdatabase.org). Item 4: Promega allele frequencies for autosomal STR's.
DUWD34	Item 3: FBI: J. Forensic Science (1999), 44(6), 1277-1286 FBI: Forensic Science Communications July, 2001; Vol 3, No.3 Item 4: FBI: J. Forensic Science (1999), 44(6), 1277-1286 FBI: Forensic Science Communications July, 2001; Vol 3, No.3
GADHZ8	Item 3: [Participant referenced a country-specific population database] Item 4: [Participant referenced a country-specific population database]
GZ9BK8	Item 3: YHRD on line database. [Participant referenced an in-house population database]. Item 4: [Participant referenced an in-house population database]
J9UG74	Item 3: NIST 9/26/13 Item 4: NIST 9/26/13
JRAP86	Item 3: Caucasian American, Bahamian, Jamaican, Trinidadian, Hispanic American, African American Item 4: Caucasian American, Bahamian, Jamaican, Trinidadian, Hispanic American, African American
MHDQ9V	Item 3: None Item 4: None
N6WLAX	Item 3: [Participant referenced a country-specific population database] Item 4: [Participant referenced a country-specific population database]

TABLE 7

WebCode	Database Used
NFGVYR	Item 3: NIST US population Database, Raw Data Excel file of Autosomal STRs using Identifiler kit (Applied Biosystems). Used CODIS system of Loci. (http://www.cstl.nist.gov/strbase/NISTpop.htm) Item 4: NIST US population Database, Raw Data Excel file of Autosomal STRs using Identifiler kit (Applied Biosystems). Used CODIS system of Loci. (http://www.cstl.nist.gov/strbase/NISTpop.htm)
QTPCZ8	Item 3: FBI published in the Journal of Forensic Sciences 46 (3) (2001) 453-489 and Forensic Science Communications 3 (3) (2001) (for D2S1338 and D19S433). Item 4: FBI published in the Journal of Forensic Sciences 46 (3) (2001) 453-489 and Forensic Science Communications 3 (3) (2001) (for D2S1338 and D19S433).
TKZGVU	Item 3: Inhouse [Laboratory] database. Item 4: Inhouse [Laboratory] database.
UDWUHK	Item 3: n/a Item 4: n/a
UQAQ63	Item 3: [Participant referenced a country-specific population database] Item 4: [Participant referenced a country-specific population database]
YHXNKW	Item 3: popstats Item 4: popstats

Amplification Kit Survey

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

TABLE 8

WebCode	Amplification Kit
9PY7UD	Will be implementing PowerPlex® ESX17 and PowerPlex® Y23.
BV2UM6	Globalfiler
GZ9BK8	SGM+, DNA select, Identifiler, Minifiler - Y filer, Y filer +
J9UG74	PP16HS, Fusion
JRAP86	Identifiler. Y-Filer will be implemented in the future.
N6WLAX	ESX
QTPCZ8	Identifiler Plus and Yfiler are used at the present time. What kits we will use in the future have yet to be chosen.
TKZGVU	Autosomal kits: (Powerplex 16), Powerplex ESX16, Powerplex ESI16, Powerplex Fusion, AmpFISTR NGM. Y-STR kits: Powerplex Y23, AmpFISTR Y-Filer.
UQAQ63	Identifiler Plus, Profiler Plus, Minifiler and Y-Filer.
YHXNKW	Currently using identifiler. Currently validating promega powerplex Y23 and ABI's Globalfiler. Soon to start validating promega fusion.

Additional Comments

TABLE 9

WebCode	Additional Comments
GZ9BK8	Note max stat quoted in [Country] is one billion - calculated statistic is greater than this.
JRAP86	In Item 4 the suspect was assumed since the stain was on his shirt. All loci used for stats except D2S1338 and D19S433. These loci are not included in the Bahamian, Jamaican, and Trinidadian databases.
QTPCZ8	It should be noted that the item numbers listed in the sample information of the FSA files is different that[sic] that of Items as described on the Instruction Sheet and FSA Sample names.
TKZGVU	Standard options used for fragments analyses in Genemarker: peak detection threshold -> min. intensity: 30rfu, percentage:>3 global max. local region: >15% local max, stutter peak filter; left 45% and right 15%. It also depends on the positive control, negative control and ladder used in the kit. For degraded or weak samples we call the peaks for heterozygosity above 20 rfu and for homozygosity above 30 rfu. For mixed profiles containing both low and high peaks, whether a low peak is called or not, also depends on factors such as the likelihood of the peak being stutter and the amount of background noise in the profile in general. Statistical analyses were performed on autosomal results only.
UQAQ63	Considering that different instruments have different performance characteristics, we applied the supplied values instead of applying our in-house validation values in the DNA analysis in Part 1[Table 1]. Our laboratory's interpretation guidelines: Analytic Threshold: Idplus (dye-channel specific - B: 85, G: 170, Y:195, R:225); Y-filer (146). Peak Height Ratio (%): Idplus (locus-specific - 53.1 - 77.3%). Stochastic Threshold: Idplus (dye-channel specific - B:295, G:530, Y:635, R:445).

Appendix: Data Sheet

Collaborative Testing Services ~ Forensic Testing Program

Test No. **14-589: DNA Interpretation**

DATA MUST BE RECEIVED BY December 8, 2014 TO BE INCLUDED IN THE REPORT

Participant Code: _____

WebCode: _____

Accreditation Release Statement

CTS submits external proficiency test data directly to ASCLD/LAB and ANSI-ASQ NAB/FQS. Please select one of the following statements to ensure your data is handled appropriately.

- This participant's data is intended for submission to ASCLD/LAB and/or ANSI-ASQ NAB/FQS. (Accreditation Release section on the last page must be completed and submitted.)
- This participant's data is NOT intended for submission to ASCLD/LAB or ANSI-ASQ NAB/FQS.

Online Data Entry: Visit www.cts-portal.com to enter and/or upload your proficiency test results online. If you have any questions please do not hesitate to contact CTS.

Scenario:

Police are investigating an aggravated assault and battery case involving a male victim and a male suspect. The Serology unit reported that only blood was found on the evidence items. The DNA unit has completely consumed all evidence items and has provided you with DNA profiles obtained from the items described below. You are requested to evaluate the DNA profiles using your laboratory specific analysis guidelines and report interpretations and statistical results.

Both .fsa and .pdf formats are provided for use in this test, choose one or both formats for evaluation.

Items Submitted (Sample Pack INT2):

- Item 1: DNA profile from Reference Sample (Male Victim).
- Item 2: DNA profile from Reference Sample (Male Suspect).
- Item 3: DNA profile from Questioned Blood stain from victim's clothing.
- Item 4: DNA profile from Questioned Blood stain from suspect's clothing.

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.

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: Analytical Threshold: 50 rfu, Peak Height Ratio: 60%, Stochastic Threshold (Peak Amplitude): 150 rfu

* Report the allelic results for each Item in the appropriate response boxes.

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

* If a major and minor contributor can be distinguished and your laboratory normally reports this distinction, divide the box with a horizontal line and report the results of the major profile above the line and the minor profile below the line - indicate which is the major profile and which is the Minor (Example A); otherwise, list the alleles in numerical order (Example B).

* Please Note: Samples were completely consumed during extraction.

Example	D2S1338	D3S1358	D5S818	D7S820	D8S1179	D13S317
A	Major 14,15	14,15	12	10,11	14	12
	Minor 15,16	12,13	12,17	6	18,19	8,11
B	14,15,16	12,13, 14,15	12,17	6,10,11	14,18,19	8,11,12

Please return all pages of this data sheet.

Page 1 of 9

Part I: DNA ANALYSIS

STR & Amelogenin Results for Known Item 1

STR Amplification Kit Used: Please indicate the electropherogram(s) reviewed for this test.			
<input type="checkbox"/> Identifiler® Plus	<input type="checkbox"/> PowerPlex® 16	<input type="checkbox"/> .fsa format	<input type="checkbox"/> .pdf format

ITEM	D2S1338	D3S1358	D5S818	D7S820	D8S1179	D13S317
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	D16S539	D18S51	D19S433	D21S11	Amelogenin	CSF1PO
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	FGA	Penta D	Penta E	TH01	TPOX	vWA
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YSTR Results for Known Item 1

YSTR Amplification Kit Used: Please indicate the electropherogram(s) reviewed for this test.							
<input type="checkbox"/> YFiler®	<input type="checkbox"/> PowerPlex® Y23	<input type="checkbox"/> .fsa format	<input type="checkbox"/> .pdf format				

ITEM	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please return all pages of this data sheet.

Part I: DNA ANALYSIS (continued)

STR & Amelogenin Results for Known Item 2

STR Amplification Kit Used: Please indicate the electropherogram(s) reviewed for this test.

Identifiler® Plus
 PowerPlex® 16
 .fsa format
 .pdf format

ITEM	D2S1338	D3S1358	D5S818	D7S820	D8S1179	D13S317
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	D16S539	D18S51	D19S433	D21S11	Amelogenin	CSF1PO
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	FGA	Penta D	Penta E	TH01	TPOX	vWA
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YSTR Results for Known Item 2

YSTR Amplification Kit Used: Please indicate the electropherogram(s) reviewed for this test.

YFiler®
 PowerPlex® Y23
 .fsa format
 .pdf format

ITEM	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part I: DNA ANALYSIS (continued)

STR & Amelogenin Results for Questioned Item 3

STR Amplification Kit Used: Please indicate the electropherogram(s) reviewed for this test.			
<input type="checkbox"/> Identifiler® Plus	<input type="checkbox"/> PowerPlex® 16	<input type="checkbox"/> .fsa format	<input type="checkbox"/> .pdf format

ITEM	D2S1338	D3S1358	D5S818	D7S820	D8S1179	D13S317
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	D16S539	D18S51	D19S433	D21S11	Amelogenin	CSF1PO
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	FGA	Penta D	Penta E	TH01	TPOX	vWA
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YSTR Results for Questioned Item 3

YSTR Amplification Kit Used: Please indicate the electropherogram(s) reviewed for this test.			
<input type="checkbox"/> YFiler®	<input type="checkbox"/> PowerPlex® Y23	<input type="checkbox"/> .fsa format	<input type="checkbox"/> .pdf format

ITEM	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 Item 3 based on comparisons with the Known Items (If the wording below differs from the normal wording of your conclusions, adapt these conclusions as best you can and use your preferred wording in the Additional Comments section.):

Item 1 Conclusion

- Item 1 (victim) is included (cannot be excluded) as a possible contributor to the DNA obtained 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 inconclusive/uninterpretable.

Item 2 Conclusion

- Item 2 (suspect) is included (cannot be excluded) as a possible contributor to the DNA obtained from Item 3.
- 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 inconclusive/uninterpretable.

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: _____

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

STR Amplification Kit Used: Please indicate the electropherogram(s) reviewed for this test.

<input type="checkbox"/> Identifiler® Plus	<input type="checkbox"/> PowerPlex® 16	<input type="checkbox"/> .fsa format	<input type="checkbox"/> .pdf format
--	--	--------------------------------------	--------------------------------------

ITEM	D2S1338	D3S1358	D5S818	D7S820	D8S1179	D13S317
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	D16S539	D18S51	D19S433	D21S11	Amelogenin	CSF1PO
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	FGA	Penta D	Penta E	TH01	TPOX	vWA
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YSTR Results for Questioned Item 4

YSTR Amplification Kit Used: Please indicate the electropherogram(s) reviewed for this test.

<input type="checkbox"/> YFiler®	<input type="checkbox"/> PowerPlex® Y23	<input type="checkbox"/> .fsa format	<input type="checkbox"/> .pdf format
----------------------------------	---	--------------------------------------	--------------------------------------

ITEM	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	DYS437	DYS438	DYS439	DYS448	DYS456	DYS458	DYS481	DYS533
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM	DYS549	DYS570	DYS576	DYS635	DYS643	Y GATA H4
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 analysis for Item 4 based on comparisons with the Known Items (If the wording below differs from the normal wording of your conclusions, adapt these conclusions as best you can and use your preferred wording in the Additional Comments section.):

Item 1 Conclusion

- Item 1 (victim) is included (cannot be excluded) as a possible contributor to the DNA obtained from Item 4.
- Item 1 (victim) is excluded as a possible contributor to the DNA obtained from Item 4.
- The DNA typing results for Item 4 in comparison with Item 1 are inconclusive/uninterpretable.

Item 2 Conclusion

- Item 2 (suspect) is included (cannot be excluded) as a possible contributor to the DNA obtained from Item 4.
- Item 2 (suspect) is excluded as a possible contributor to the DNA obtained from Item 4.
- The DNA typing results for Item 4 in comparison with Item 2 are inconclusive/uninterpretable.

3) Statistical Analysis of Item 4 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: _____

4) Please list any databases used in the statistical analyses of Item 4 below.

Participant Code:
WebCode:

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.

<p>Return Instructions: Data must be received via online data entry, fax (please include a cover sheet), or mail by <i>December 08, 2014</i> to be included in the report.</p> <p>QUESTIONS? TEL: +1-571-434-1925 (8 am - 4:30 pm EST) EMAIL: forensics@cts-interlab.com www.ctsforensics.com</p>	<p>Participant Code:</p> <p>ONLINE DATA ENTRY: www.cts-portal.com FAX: +1-571-434-1937 or Toll-Free: 1-866-FAX-2CTS MAIL: Collaborative Testing Services, Inc. P.O. Box 650820 Sterling, VA 20165-0820 USA</p>
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Please return all pages of this data sheet.

RELEASE OF DATA TO ACCREDITATION BODIES

The following Accreditation Releases will apply only to:

Participant Code:

WebCode:

for Test No. **14-589: DNA Interpretation**

This release page must be completed and received by **December 8, 2014** to have this participant's submitted data included in the reports forwarded to the respective Accreditation Bodies.

ASCLD/LAB RELEASE

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

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

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

Signature _____ Date _____

Laboratory Name _____

Location (City/State) _____

ANSI-ASQ NAB/FQS RELEASE

If your laboratory maintains its accreditation through ANSI-ASQ NAB/FQS, please complete the following form in its entirety to have your results forwarded.

ANSI-ASQ NAB/FQS Certificate No. _____

Signature and Title _____ Date _____

Laboratory Name _____

Location (City/State) _____

Accreditation Release

Return Instructions

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

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

Please return all pages of this data sheet.

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