



Probabilistic Genotyping Test No. 25-5904/5

Summary Report

Each participant received a sample pack consisting of two known bloodstains and two questioned stains which they were asked to analyze using their existing protocols. Data were returned from 60 participants and are compiled into the following tables:

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

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

Manufacturer's Information

Each sample pack consisted of two known bloodstains provided on either white fabric or FTA™ Micro Cards, and two questioned stains on colored fabric. Participants were asked to analyze these items using their existing protocols.

SAMPLE PREPARATION: Stains from different sources were prepared at separate times and were packaged once they were thoroughly dried into separate envelopes.

SAMPLE PACK ASSEMBLY: One of each item was placed into a pre-labeled sample pack envelope and sealed. The sealed envelopes were then packaged in pre-labeled heat seal envelopes and sealed. Completed sample packs were stored at -20°C until shipment.

VERIFICATION: Predistribution results were consistent with each other and the manufacturer's preparation information. Consistent allelic results were reported for all STR and YSTR loci.

Item	Known/ Questioned	Substrate (Test No.)	Body Fluid	Volume (Mixture Ratio)	Sex	Donor Information
1	Known	White Fabric (5904)/ FTA™ Micro Card (5905)	Blood	50 µL/75 µL	Female	Victim
2	Known	White Fabric (5904)/ FTA™ Micro Card (5905)	Blood	50 µL/75 µL	Male	Suspect
3	Questioned	Tan Fabric	Blood/Blood/Blood	50 µL (1:1:1)	Male/Male/Male	Suspect/Additional Male A/Additional Male B
4	Questioned	Blue Fabric	Blood/Blood/Semen	50 µL (1:1:1)	Female/Male/Male	Victim/Additional Male A/Additional Male C

Manufacturer's Information, continued

Amelogenin and STR Results						
<i>Results compiled from predistribution laboratories and a consensus of at least 10 participants.</i>						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	
1	14,16,3	16,17	13,14	15,15	12,12	*
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26	2,2,5	10,15	17,28.2	6,8	6,11
	16,17	NM	NM	NM	NM	
2	11,17,3	19,21	12,14	16,16	9,12	*
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12,2,14	30,32	15,19	X,Y	11,12
	23,2,24	7,8	13,13	18,20	7,7	10,12
	16,17	10	*	*	2	
3	11,12,15,17,3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	*
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12,2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23,2,24,25,27	2,2,7,8,9,13	5,9,10,13,21	17,18,20,26,2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11	*	*	2	
4-Blood	12,14,16,3,17,3	16,17,19,20	10,12,13,14	15,16,18	12,13	*
	9,11	12,13,14,15	11,14,16	17,19,23,25	11,12,13	11,11
	14,16,17	13,14	28,29,30	11,15,17	X,Y	10,11,12
	21,22,24,26	2,2,5,9	9,10,15	17,26,2,28.2	6,7,8	6,8,11
	16,17	11	*	*	2	
4-Semen	15,3,16,3	17,25	10,14	12,18	12,12	*
	9,10	13,13	13,13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15,15	X,Y	11,12
	20,22	9,12	10,14	15,17	6,7	8,12
	16,18	11	*	*	2	

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

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

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

Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	YGATAH4
2	*	16	16,18	13	30	21	10	11	15
	14	11	13	21	*	16	16	*	24
	*	12	*	17	19	*	21	*	11
3	*	13,14,16	11,14,16,17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21	*	15,16	16,17,18	*	22,24,25
	*	10,12	*	17	17,19,20	*	21,23,24	*	11,12
4-Blood	*	14	11,14	13	29	24	11	14	13
	15	12	12	19	*	16	18	*	22
	*	12	*	17	20	*	24	*	12
4-Semen	*	14	11,14	13	29	21	11	13	13
	15	12	12	19	*	18	17	*	22
	*	14	*	17	17	*	23	*	12

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

Summary Comments

This test was designed to allow participants to assess their proficiency in the identification and comparison of dried stains by means of body fluid screening and/or DNA profiling utilizing Probabilistic Genotyping software. Participants were supplied with two "known" bloodstains (Items 1 and 2) and two "questioned" stains (Items 3 and 4). Item 1 was created using blood from a female donor. Item 2 was created using blood from a male donor. Item 3 was created by combining equal parts of blood from the Item 2 male donor and two additional male donors, whose known standards were not provided. Item 4 was created by combining one part blood from the Item 1 female donor, one part blood from one of the male donors in Item 3, and one part semen from another male donor, whose known standard was not provided. Refer to the Manufacturer's Information for preparation details.

Data were returned by 60 participants.

Screening Test Results

Screening results for body fluids were returned by a total of 47 participants. However, not all of these participants returned screening results for each fluid type for both questioned items.

For Item 3, all participants reported "Positive" for the presence of blood. For the presence of semen, all participants reported "Negative". For the presence of saliva, all participants reported "Negative". For Human Origin Screening and Y-Screening, all participants reported "Positive".

For Item 4, all participants reported "Positive" for the presence of blood. For the presence of semen, all participants reported "Positive". For the presence of saliva, all participants reported "Negative". For Human Origin Screening and Y-Screening, all participants reported "Positive".

DNA Analysis

All participants reported DNA results. Only allelic results not containing the minimum expected alleles are highlighted as inconsistent.

For STR results, all participants reported consistent results, with the exception of nineteen participants. Of the participants who reported inconsistent results, all were missing alleles at one or more loci for one or both questioned items (Items 3 and 4). For Item 3, nine participants reported inconsistent results, the majority of which were missing alleles attributable to Additional Male B. Five of these participants were missing a "6" allele at locus TH01. For Item 4-Blood, nine participants reported inconsistent results, the majority of which were missing alleles attributable to Additional Male A.

For YSTR results, all participants reported consistent results, with the exception of three participants.

DNA Interpretations

For Item 3, all but one participant excluded the victim (Item 1) as a possible contributor to the stain. The remaining participant reported "Inconclusive". All participants included the suspect (Item 2) as a possible contributor. All but one participant identified the presence of three contributors. The remaining participant reported the presence of four contributors. An additional participant performed a differential extraction on this item and reported the presence of three contributors.

For Item 4, all participants included the victim (Item 1) as a possible contributor to the stain. All but one participant excluded the suspect (Item 2) as a possible contributor to the stain. The remaining participant reported "Inconclusive". All but four participants identified the presence of three contributors in the epithelial fraction. Of the remaining participants, three reported the presence of two contributors and one reported the presence of four contributors. For the sperm fraction, all but five participants identified the presence of one contributor. Of the remaining participants, four reported the presence of two contributors and one reported the presence of three contributors. An additional four participants did not perform a differential extraction on this item, but reported the presence of three contributors.

Key for Screening Tests Used

Participants were asked to use, where possible, the following chart of abbreviated screening test names. This was not an all inclusive list and was not designed to determine what tests should be performed. Participants were advised that tests not on this list may be used for screening.

Test	Abbreviation
Acid Phosphatase	AP
Kastle Meyer	KM
Leucomalachite Green	LMG
Microscopic	Micro
Ortho-tolidine	O-tol
Phenolphthalein-Tetramethyl benzidine	PTMB
Prostate Specific Antigen	PSA
Quantiblot	QB
Quantifiler	QF
Tetramethyl benzidine	TMB

Serology Screening Results

Indicate the results of any screening tests performed on the questioned stains (Items 3 & 4).

TABLE 1a

Blood Screening Results		
WebCode - Test	Item 3	Item 4
2PKGL3 - 5905	Pos KM, HEMATRACE	Pos KM, HEMATRACE
3FYBNX - 5905	Pos KM	Pos KM
3ZKZ6H - 5905	Pos KM	Pos KM
6BYVXE - 5905	Pos TMB, HemaTrace	Pos TMB, HemaTrace
7Q4RNQ - 5905	Pos KM	Pos KM
7ZTBBC - 5904	Pos O-tol	Pos O-tol
96BRBQ - 5904	Pos KM	Pos KM
9A8E2U - 5904	Pos Tetra base test	Pos Tetra base test
AAQAC9 - 5905	Pos KM, Hematrace (RSID)	Pos KM, Hematrace (RSID)
BVLLQR - 5905	Pos KM, HemaTrace	Pos KM, HemaTrace
BXR27B - 5904	Pos KM	Pos KM
BY24RA - 5904	Pos KM	Pos KM
C3CKHP - 5905	Pos RSID Blood	Pos RSID Blood
C3G3FN - 5904	Pos KM	Pos KM
C4CGA9 - 5904	Pos KM	Pos KM
CHQN4K - 5905	Pos KM	Pos KM
DBN2PP - 5905	Pos KM, Hematrace	Pos KM, Hematrace
DHPAD7 - 5904	Pos O-tol, Hematrace	Pos O-tol, Hematrace
DKCV2M - 5904	Pos KM	Pos KM
DT7ZVN - 5905	Pos KM	Pos KM

TABLE 1a

Blood Screening Results		
WebCode - Test	Item 3	Item 4
DU2EN8 - 5904	Pos KM	Pos KM
DYUHBK - 5904	Pos KM	Pos KM
G24YWK - 5904	Pos O-tol, Hematrace	Pos O-tol, Hematrace
GGKX2L - 5904	Pos KM, HemDirect	Pos KM, HemDirect
GJNQVJ - 5904	Pos	Pos
GKJ9WL - 5905	Pos Hemochromogen	Pos Hemochromogen
GX7FUL - 5905	Pos KM, HemaTrace	Pos KM, HemaTrace
HKGYMZ - 5905	Pos KM, HemaTrace	Pos KM, HemaTrace
J3QFZD - 5905	Pos KM	Pos KM
JL7N2D - 5904	Pos KM	Pos KM
JPNR9J - 5905	Pos FOB, perox	Pos Peroxtesmo, FOB
JUL73Z - 5905	Pos H'stix, Hema Trace	Pos H'Stix, Hema Trace
JYR46D - 5905	Pos KM	Pos KM
K9ZQYY - 5905	Pos TMB	Pos TMB, Hematrace
L7KVQC - 5904	Pos KM	Pos KM
N7X8GF - 5905	Pos KM, Hematrace	Pos KM, Hematrace
QFEREA - 5905	Pos KM	Pos KM
RBHJQT - 5904	Pos KM, Hemdirect HB	Pos KM, Hemdirect HB
RJ7JZB - 5905	Pos KM, Hematrace	Pos KM, Hematrace
T6PLVB - 5905	Pos KM, Hematrace	Pos KM, Hematrace
TN6UVB - 5905	Pos KM, Hematrace	Pos KM, Hematrace
URYBLA - 5905	Pos KM, Hematrace	Pos KM, Hematrace

TABLE 1a

Blood Screening Results		
WebCode - Test	Item 3	Item 4
UTAD89 - 5905	Pos KM, Hematrace	Pos KM, Hematrace
WFEJA7 - 5904	Pos O-tol, Hematrace	Pos O-tol, Hematrace
WNAN48 - 5905	Pos FOB test	Pos FOB test
XJ9YZ6 - 5905	Pos LMG	Pos LMG
ZNHWKW - 5905	Pos KM	Pos KM

Table 1a: Serology Screening Response Summary - Blood			Participants: 47
This summary table excludes the count of participants who did not report or reported "Not Tested" for Item 3 and/or Item 4. Therefore, participant total may not align with totals shown below.			
	Item 3	Item 4	
Positive	47	47	
Negative	0	0	
Inconclusive	0	0	

Serology Screening Results

Indicate the results of any screening tests performed on the questioned stains (Items 3 & 4).

TABLE 1b

Semen Screening Results		
WebCode - Test	Item 3	Item 4
2PKGL3 - 5905	Neg AP	Pos AP, MICRO, PSA
3FYBNX - 5905	Neg ALS, AP, micro (sperm)	Pos ALS, AP, micro (sperm)
3ZKZ6H - 5905	Neg AP	Pos AP and PSA
6BYVXE - 5905	Neg AP	Pos AP, Micro, PSA
7Q4RNQ - 5905	Neg AP	Pos AP, Micro
7ZTBBC - 5904	Neg AP	Pos AP + Micro
96BRBQ - 5904	Neg AP	Pos AP, microscopy
9A8E2U - 5904	Neg RSID Semen	Pos RSID Semen
AAQAC9 - 5905	Neg ALS, AP	Pos ALS, AP, RSID, micro
BVLLQR - 5905	Neg AP	Pos AP, micro, PSA
BXR27B - 5904	Neg AP, Micro	Pos AP, Micro
BY24RA - 5904	Neg AP, Micro	Pos AP, Micro
C3CKHP - 5905	Neg RSID Semen	Pos RSID Semen
C3G3FN - 5904	Neg AP	Pos AP, Micro
C4CGA9 - 5904	Neg AP	Pos AP, Micro
CHQN4K - 5905	Neg AP	Pos AP, Micro
DBN2PP - 5905	Neg AP	Pos AP, PSA, Micro
DHPAD7 - 5904	Neg ALS, AP	Pos PSA
DKCV2M - 5904	Neg ALS, AP	Pos ALS, AP

TABLE 1b

Semen Screening Results		
WebCode - Test	Item 3	Item 4
DT7ZVN - 5905	Neg AP	Pos AP, Micro
DU2EN8 - 5904	Neg AP	Pos AP, Micro
DYUHBK - 5904	Neg ALS, AP	Pos ALS, AP
G24YWK - 5904	Neg Micro	Pos Micro
GGKX2L - 5904	Neg ALS, AP	Pos ALS, AP, micro, PSA
GJNQVJ - 5904	Neg	Pos
GKJ9WL - 5905	Neg AP	Pos AP, Micro
GX7FUL - 5905	Neg AP	Pos AP, micro, PSA
HKGYMZ - 5905	Neg AP	Pos AP, RSID Semen
J3QFZD - 5905	Neg AP	Pos AP, micro
JL7N2D - 5904	Neg ALS, AP	Pos ALS, AP
JPNR9J - 5905	Neg Phosphatesmo, RSID Semen	Pos Phosphatesmo, RSID Semen
JUL73Z - 5905	Neg AP, P30	Pos AP, P30, Micro
JYR46D - 5905	Neg AP, Micro	Pos AP, Micro
K9ZQYY - 5905	Neg AP	Pos AP, Micro, PSA
L7KVQC - 5904	Neg ALS, AP	Pos ALS, AP, Micro, PSA
N7X8GF - 5905	Neg AP	Pos AP, Micro, PSA
QFEREA - 5905	Neg AP, Micro	Pos AP, Micro
RBHJQT - 5904	Neg AP	Pos AP, Micro, PSA
RJ7JZB - 5905	Neg AP	Pos AP, PSA, Micro

TABLE 1b

Semen Screening Results		
WebCode - Test	Item 3	Item 4
T6PLVB - 5905	Neg AP	Pos AP, PSA, micro
TN6UVB - 5905	Neg AP	Pos AP, Micro, PSA
URYBLA - 5905	Neg AP	Pos AP, PSA, Micro
UTAD89 - 5905	Neg AP	Pos AP, PSA, Micro
WFEJA7 - 5904	Neg AP, PSA, micro	Pos AP, PSA, micro
WNAN48 - 5905	Neg PSA, RSID Semen	Pos PSA, RSID Semen
XJ9YZ6 - 5905	Neg AP, Micro	Pos AP, Micro
ZNHWKW - 5905	Neg AP	Pos AP, Micro

Table 1b: Serology Screening Response Summary - Semen			Participants: 47
This summary table excludes the count of participants who did not report or reported "Not Tested" for Item 3 and/or Item 4. Therefore, participant total may not align with totals shown below.			
	Item 3	Item 4	
Positive	0	47	
Negative	47	0	
Inconclusive	0	0	

Serology Screening Results

Indicate the results of any screening tests performed on the questioned stains (Items 3 & 4).

TABLE 1c

Saliva Screening Results		
WebCode - Test	Item 3	Item 4
3ZKZ6H - 5905	Neg Phadebas® press	Neg Phadebas® press
7Q4RNQ - 5905	Neg Phadbas	Neg Phadbas
96BRBQ - 5904	NT	Neg Phadebas
9A8E2U - 5904	Neg RSID Saliva	Neg RSID Saliva
C3CKHP - 5905	Neg RSID Saliva	Neg RSID Saliva
CHQN4K - 5905	Neg Phadebas	Neg Phadebas
DHPAD7 - 5904	Neg ALS, RSID	Neg RSID, ALS
GGKX2L - 5904	Neg Seratec alpha- amylase	Neg Seratec alpha- amylase
GJNQVJ - 5904	Neg	Neg
J3QFZD - 5905	Neg Phadebas	Neg Phadebas
JYR46D - 5905	Neg Phadebas	Neg Phadebas
K9ZQYY - 5905	NT	Neg RSID Saliva
WFEJA7 - 5904	Neg RSID, micro	Neg RSID, micro
WNAN48 - 5905	Neg RSID Saliva	Neg RSID Saliva
ZNHWKW - 5905	Neg Phadebas	Neg Phadebas

Table 1c: Serology Screening Response Summary - Saliva			Participants: 15
This summary table excludes the count of participants who did not report or reported "Not Tested" for Item 3 and/or Item 4. Therefore, participant total may not align with totals shown below.			
	Item 3	Item 4	
Positive	0	0	
Negative	13	15	
Inconclusive	0	0	

Serology Screening Results

Indicate the results of any screening tests performed on the questioned stains (Items 3 & 4).

TABLE 1d

Human Origin Screening Results		
WebCode - Test	Item 3	Item 4
3ZKZ6H - 5905	Pos ABACard® HemaTrace®	NT
6BYVXE - 5905	Pos Quantifiler Trio, PP21	Pos Quantifiler Trio, PP21
7ZTBBC - 5904	Pos Hematrace	Pos Hematrace
96BRBQ - 5904	Pos DNA	Pos DNA
9A8E2U - 5904	Pos qPCR	Pos qPCR
C3CKHP - 5905		Pos
C4CGA9 - 5904	Pos PowerQuant	Pos PowerQuant
DHPAD7 - 5904	Pos Hematrace, Quantifiler Trio, GlobalFiler (GF)	Pos Hematrace, Quantifiler Trio, GlobalFiler
DU2EN8 - 5904	Pos PowerQuant	Pos PowerQuant
GGKX2L - 5904	Pos Ouchterlony double immunodiffusion	Pos Ouchterlony double immunodiffusion
JPNR9J - 5905	Pos Quantifiler Trio	Pos Quantifiler Trio
JUL73Z - 5905	Pos Quant Trio, PP21	Pos Quant Trio, PP21
K9ZQYY - 5905	Pos Quant trio, PP21, YFP	Pos Quant trio, PP21, YFP
L7KVQC - 5904	Pos Hematrace	Pos Hematrace

Table 1d: Serology Screening Response Summary - Human Origin			Participants: 14
This summary table excludes the count of participants who did not report or reported "Not Tested" for Item 3 and/or Item 4. Therefore, participant total may not align with totals shown below.			
	Item 3	Item 4	
Positive	13	13	
Negative	0	0	
Inconclusive	0	0	

Serology Screening Results

Indicate the results of any screening tests performed on the questioned stains (Items 3 & 4).

TABLE 1e

Y Screening Results		
WebCode - Test	Item 3	Item 4
3ZKZ6H - 5905	Pos Plexor HY	Pos Plexor HY
9A8E2U - 5904	Pos qPCR	Pos qPCR
BDJ4FM - 5904	Pos Quant Trio	Pos Quant Trio
C4CGA9 - 5904	Pos CaseworkDirect,PowerQuant	Pos CaseworkDirect,PowerQuant
DHPAD7 - 5904	Pos Quantifier Trio, Y-Filer Plus, DYS391 (GF), Y-Indel (GF)	Pos Quantifier Trio, Y-Filer Plus, DYS391 (GF), Y-Indel (GF)
DKCV2M - 5904	Pos Quantifier Trio	Pos Quantifier Trio
DU2EN8 - 5904	Pos CaseworkDirect,PowerQuant	Pos CaseworkDirect,PowerQuant
DYUHBK - 5904	Pos Quant Trio	Pos Quant Trio
FXD9BH - 5904	Pos Quant Trio	Pos Quant Trio
G24YWK - 5904	Pos Powerquant	Pos Powerquant
HKGYMZ - 5905	Pos Y-Quant	Pos Y-Quant
JL7N2D - 5904	Pos QuantTrio	Pos QuantTrio
JPNR9J - 5905	Pos Quantifier Trio	Pos Quantifier Trio
JUL73Z - 5905	Pos Quant Trio, PP21	Pos Quant Trio, PP21
K9ZQYY - 5905	Pos Quant trio, YFP	Pos Quant trio, YFP
L7KVQC - 5904	Pos Quant Trio	Pos Quant Trio
QA8428 - 5904	Pos Quant Trio	Pos Quant Trio
QHGTE7 - 5904	Pos Quant Trio	Pos Quant Trio
U7DE86 - 5904	Pos Quantifier Trio	Pos Quantifier Trio
UX3CL6 - 5904	Pos Quant Trio	Pos Quant Trio
WFEJA7 - 5904	Pos PowerQuant	Pos PowerQuant
YNL3LZ - 5904	Pos Quantifier Trio	Pos Quantifier Trio
ZTPKXX - 5904	Pos Quant Trio	Pos Quant Trio

Table 1e: Serology Screening Response Summary - Y Screening			Participants: 23
This summary table excludes the count of participants who did not report or reported "Not Tested" for Item 3 and/or Item 4. Therefore, participant total may not align with totals shown below.			
	Item 3	Item 4	
Positive	23	23	
Negative	0	0	
Inconclusive	0	0	

Serology Screening Results

Indicate the results of any screening tests performed on the questioned stains (Items 3 & 4).

TABLE 1f

Other Screening Results				
WebCode - Test	Item 3		Item 4	
DHPAD7 - 5904			sperm Pos	Micro
GKJ9WL - 5905	hair Neg	visual	hair Neg	visual
HKGYMZ - 5905			Spermatozoa Pos	Microscopy

DNA Interpretations

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

TABLE 2

WebCode- Test	<u>Victim (Item 1)</u>		<u>Suspect (Item 2)</u>		WebCode- Test	<u>Victim (Item 1)</u>		<u>Suspect (Item 2)</u>	
	Item 3	Item 4	Item 3	Item 4		Item 3	Item 4	Item 3	Item 4
2PKGL3 - 5905	No	Yes	Yes	No	CHQN4K - 5905	No	Yes	Yes	No
3FYBNX - 5905	No	Yes	Yes	No	DBN2PP - 5905	No	Yes	Yes	No
3ZKZ6H - 5905	No	Yes	Yes	No	DHPAD7 - 5904	No	Yes	Yes	No
4VL4UG - 5904	No	Yes	Yes	No	DKCV2M - 5904	No	Yes	Yes	No
6BYVXE - 5905	No	Yes	Yes	No	DT7ZVN - 5905	No	Yes	Yes	No
7Q4RNNQ - 5905	No	Yes	Yes	No	DU2EN8 - 5904	No	Yes	Yes	No
7ZTBBC - 5904	No	Yes	Yes	No	DYUHBK - 5904	No	Yes	Yes	No
8AD99V - 5905	No	Yes	Yes	No	FQDN9M - 5905	No	Yes	Yes	No
96BRBQ - 5904	No	Yes	Yes	No	FXD9BH - 5904	No	Yes	Yes	No
9A8E2U - 5904	No	Yes	Yes	No	FZHVNM - 5905	No	Yes	Yes	No
AAQAC9 - 5905	No	Yes	Yes	No	G24YWK - 5904	No	Yes	Yes	No
AUXKFC - 5905	No	Yes	Yes	No	GGKX2L - 5904	No	Yes	Yes	No
BDJ4FM - 5904	No	Yes	Yes	No	GJNQVJ - 5904	No	Yes	Yes	No
BVLLQR - 5905	No	Yes	Yes	No	GKJ9WL - 5905	No	Yes	Yes	No
BXR27B - 5904	No	Yes	Yes	No	GX7FUL - 5905	No	Yes	Yes	No
BY24RA - 5904	No	Yes	Yes	No	HKGYMZ - 5905	No	Yes	Yes	No
C3CKHP - 5905	No	Yes	Yes	No	J3QFZD - 5905	No	Yes	Yes	No
C3G3FN - 5904	No	Yes	Yes	No	JL7N2D - 5904	No	Yes	Yes	No
C4CGA9 - 5904	No	Yes	Yes	No	JPNR9J - 5905	No	Yes	Yes	No
					JUL73Z - 5905	No	Yes	Yes	No

TABLE 2

WebCode- Test	<u>Victim (Item 1)</u>		<u>Suspect (Item 2)</u>		WebCode- Test	<u>Victim (Item 1)</u>		<u>Suspect (Item 2)</u>	
	Item 3	Item 4	Item 3	Item 4		Item 3	Item 4	Item 3	Item 4
JYR46D - 5905	No	Yes	Yes	No					
K9ZQYY - 5905	No	Yes	Yes	No					
L7KVQC - 5904	No	Yes	Yes	No					
N7X8GF - 5905	No	Yes	Yes	No					
QA8428 - 5904	No	Yes	Yes	No					
QFEREA - 5905	No	Yes	Yes	No					
QHGTE7 - 5904	No	Yes	Yes	No					
RBHJQT - 5904	No	Yes	Yes	No					
RJ7JZB - 5905	No	Yes	Yes	No					
T6PLVB - 5905	No	Yes	Yes	No					
TN6UVB - 5905	No	Yes	Yes	No					
U7DE86 - 5904	No	Yes	Yes	No					
URYBLA - 5905	No	Yes	Yes	No					
UTAD89 - 5905	No	Yes	Yes	No					
UX3CL6 - 5904	No	Yes	Yes	No					
WFEJA7 - 5904	No	Yes	Yes	No					
WNAN48 - 5905	No	Yes	Yes	No					
XJ9YZ6 - 5905	Inc	Yes	Yes	Inc					
YNL3LZ - 5904	No	Yes	Yes	No					
ZNHWKW - 5905	No	Yes	Yes	No					
ZTPKXX - 5904	No	Yes	Yes	No					

DNA Interpretation**Response Summary****Participants reporting DNA results: 60**

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

	Victim (Item 1)		Suspect (Item 2)	
	<u>Item 3</u>	<u>Item 4</u>	<u>Item 3</u>	<u>Item 4</u>
Yes	0	60	60	0
No	59	0	0	59
Inc	1	0	0	1
No Interpretation	0	0	0	0
No Response	0	0	0	0

STR Amplification Kit(s) & Results

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

2PKGL3 - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
3FYBNX - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
3ZKZ6H - 5905		Identifiler® Plus				
1		16,17		15,15	12,12	
	11,11	13,14			12,13	11,11
	17,17	14,14	28,28		X,X	11,12
	22,26				6,8	6,11
	16,17					
4VL4UG - 5904		GlobalFiler™ Express- STRMix™				
1	14,16.3	16,17	13,14	15	12	NT
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26	NT	NT	17,28.2	6,8	6,11
	16,17	NR	NT	NT	NR	
6BYVXE - 5905		PowerPlex® 21- STRMix™ v2.10.0				
1	14,16.3	16,17		15,15	12,12	11,12
	11,11	13,14		17,23	12,13	11,11
	17,17	14,14	28,28		X,X	11,12
	22,26	2.2,5	10,15		6,8	6,11
	16,17					
7Q4RNP - 5905		GlobalFiler™ - STRMix™ v2.9.1				
1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

7ZTBBC - 5904		PowerPlex® 21				
1	14,16.3	16,17		15,15	12,12	11,12
	11,11	13,14		17,23	12,13	11,11
	17,17	14,14	28,28		X,X	11,12
	22,26	2.2,5	10,15		6,8	6,11
	16,17					
8AD99V - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17	NR			NR	
96BRBQ - 5904		PowerPlex® ESI				
1	14,16.3	16,17	13,14	15,15		
		13,14	14,16	17,23		11,11
	17,17	14,14	28,28	11,15	X,X	
	22,26			17,28.2	6,8	
	16,17					
9A8E2U - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
AAQAC9 - 5905		PowerPlex® 21				
1	14,16.3	16,17		15,15	12,12	11,12
	11,11	13,14		17,23	12,13	11,11
	17,17	14,14	28,28		X,X	11,12
	22,26	2.2,5	10,15		6,8	6,11
	16,17					
AUXKFC - 5905		GlobalFiler™ EXPRESS				
1	14,16.3	16,17	13,14	15	12	NT
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26	NT	NT	17,28.2	6,8	6,11
	16,17	NR	NT	NT	NR	
BDJ4FM - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

BVLLQR - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
BXR27B - 5904		GlobalFiler™ - STRMix™ 2.6.3				
1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17	NA			NA	
BY24RA - 5904		GlobalFiler™ - STRMix™				
1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17	NA			NA	
C3CKHP - 5905		PowerPlex® Fusion6C				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X,X	11,12
	22,26	2.2,5	10,15	17,28.2	6,8	6,11
	16,17					
C3G3FN - 5904		GlobalFiler™ - STRMix™				
1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
C4CGA9 - 5904		Identifiler® Plus, PowerPlex® Fusion 6C, Minifiler				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26	2.2,5	10,15	17,28.2	6,8	6,11
	16,17					
CHQN4K - 5905		GlobalFiler™ - STRMix™ v2.9.1				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

DBN2PP - 5905		GlobalFiler™ - STRMix™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
DHPAD7 - 5904		GlobalFiler™ - STRMix™ V2.6.3				
1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
DKCV2M - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
DT7ZVN - 5905		GlobalFiler™ Express- STRMix™				
1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
DU2EN8 - 5904		Identifiler® Plus, PowerPlex® Fusion 6C, MiniFiler				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26	2.2,5	10,15	17,28.2	6,8	6,11
	16,17					
DYUHBK - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
FQDN9M - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17	NR			NR	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

FXD9BH - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
FZHVNM - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17	NR			NR	
G24YWK - 5904		PowerPlex® Fusion 6C- STRMix™ v2.9.0				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26	2.2,5	10,15	17,28.2	6,8	6,11
	16,17					
GGKX2L - 5904		Identifiler® Plus - EuroForMix				
1		16,17		15,15	12,12	
	11,11	13,14			12,13	11,11
	17,17	14,14	28,28		X,X	11,12
	22,26				6,8	6,11
	16,17					
GJNQVJ - 5904		NGMSelect				
1	14,16.3	16,17	13,14	15,15		
		13,14	14,16	17,23		11,11
	17,17	14,14	28,28	11,15	X,X	
	22,26			17,28.2	6,8	
	16,17					
GKJ9WL - 5905		Identifiler® plus- STRMix™ v 2.7				
1		16,17		15,15	12,12	
	11,11	13,14			12,13	11,11
	17,17	14,14	28,28		X,X	11,12
	22,26				6,8	6,11
	16,17					
GX7FUL - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

HKGYZM - 5905 PowerPlex® 21

1	14,16.3	16,17		15,15	12,12	11,12
	11,11	13,14		17,23	12,13	11,11
	17,17	14,14	28,28		X,X	11,12
	22,26	2.2,5	10,15		6,8	6,11
	16,17					

J3QFZD - 5905 GlobalFiler™ - STRMix™ v2.9.1

1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

JL7N2D - 5904 GlobalFiler™

1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

JPNR9J - 5905 GlobalFiler™

1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

JUL73Z - 5905 PowerPlex® 21- STRMix™ v 2.10

1	14,16.3	16,17		15,15	12,12	11,12
	11,11	13,14		17,23	12,13	11,11
	17,17	14,14	28,28		X,X	11,12
	22,26	2.2,5	10,15		6,8	6,11
	16,17					

JYR46D - 5905 GlobalFiler™ - STRMix™ v2.9.1

1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

K9ZQYY - 5905 PowerPlex® 21

1	14,16.3	16,17		15,15	12,12	11,12
	11,11	13,14		17,23	12,13	11,11
	17,17	14,14	28,28		X,X	11,12
	22,26	2.2,5	10,15		6,8	6,11
	16,17					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

L7KVQC - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
N7X8GF - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
QA8428 - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
QFEREA - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
QHGTE7 - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
RBHJQT - 5904		PowerPlex® Fusion 6C- STRMix™ 2.6				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26	2.2,5	10,15	17,28.2	6,8	6,11
	16,17	NID	NID	NID		
RJ7JZB - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

T6PLVB - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
TN6UVB - 5905		GlobalFiler™ - STRMix™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
U7DE86 - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
URYBLA - 5905		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
UTAD89 - 5905		GlobalFiler™ - STRMix™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
UX3CL6 - 5904		GlobalFiler™				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					
WFEJA7 - 5904		PowerPlex® Fusion6C- STRMix™ v2.9				
1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26	2.2,5	10,15	17,28.2	6,8	6,11
	16,17					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 1 - STR Results

WNAN48 - 5905 PowerPlex® Fusion6C - LRMixStudio

1	14,16.3	16,17	13,14	15,15	12,12	
	11,11	13,14	14,16	17,23	12,13	11,11
	17,17	14,14	28,28	11,15	X,X	11,12
	22,26	2.2,5	10,15	17,28.2	6,8	6,11
	16,17					

XJ9YZ6 - 5905 PowerPlex® Fusion 6C - DNAXs

1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26	2.2,5	10,15	17,28.2	6,8	6,11
	16,17					

YNL3LZ - 5904 GlobalFiler™ - STRMix™

1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

ZNHWKW - 5905 GlobalFiler™ - STRMix™ v2.9.1

1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X,X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

ZTPKXX - 5904 GlobalFiler™ - STRMix™

1	14,16.3	16,17	13,14	15	12	
	11	13,14	14,16	17,23	12,13	11
	17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

2PKGL3 - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
3FYBNX - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
3ZKZ6H - 5905		Identifiler® Plus				
2		19,21		16,16	9,12	
	10,10	13,13			12,14	11,11
	15,16	12.2,14	30,32		X,Y	11,12
	23.2,24				7,7	10,12
	16,17					
4VL4UG - 5904		GlobalFiler™ - STRMix™				
2	11,17.3	19,21	12,14	16	9,12	NT
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	NT	NT	18,20	7	10,12
	16,17	10	NT	NT	2	
6BYXE - 5905		PowerPlex® 21- STRMix™ v2.10.0				
2	11,17.3	19,21		16,16	9,12	13,18
	10,10	13,13		18,19	12,14	11,11
	15,16	12.2,14	30,32		X,Y	11,12
	23.2,24	7,8	13,13		7,7	10,12
	16,17					
7Q4RNQ - 5905		GlobalFiler™ - STRMix™ v2.9.1				
2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7,7	10,12
	16,17	10			2	
7ZTBBC - 5904		PowerPlex® 21				
2	11,17.3	19,21		16,16	9,12	13,18
	10,10	13,13		18,19	12,14	11,11
	15,16	12.2,14	30,32		X,Y	11,12
	23.2,24	7,8	13,13		7,7	10,12
	16,17					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

8AD99V - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7,7	10,12
	16,17	10			2	
96BRBQ - 5904		NGM Select				
2	11,17.3	19,21	12,14	16,16		
	10	13,13	14,14	18,19		11,11
	15,16	12.2,14	30,32	15,19	X,Y	
	23.2,24			18,20	7,7	
	16,17					
9A8E2U - 5904		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
AAQAC9 - 5905		PowerPlex® 21				
2	11,17.3	19,21		16,16	9,12	13,18
	10,10	13,13		18,19	12,14	11,11
	15,16	12.2,14	30,32		X,Y	11,12
	23.2,24	7,8	13,13		7,7	10,12
	16,17					
AUXKFC - 5905		GlobalFiler™ Express- STRMix™ v 2.8.0				
2	11,17.3	19,21	12,14	16	9,12	NT
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	NT	NT	18,20	7	10,12
	16,17	10	NT	NT	2	
BDJ4FM - 5904		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
BVLLQR - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

BXR27B - 5904 GlobalFiler™ - STRMix™ 2.6.3

2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7,7	10,12
	16,17	10			2	

BY24RA - 5904 GlobalFiler™ - STRMix™

2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7,7	10,12
	16,17	10			2	

C3CKHP - 5905 PowerPlex® Fusion6C

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	7,8	13	18,20	7	10,12
	16,17	10	17	19		

C3G3FN - 5904 GlobalFiler™ - STRMix™

2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7,7	10,12
	16,17	10			2	

C4CGA9 - 5904 Identifiler® Plus, PowerPlex® Fusion 6C, Minifiler

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	7,8	13	18,20	7	10,12
	16,17	10	17	19		

CHQN4K - 5905 GlobalFiler™ - STRMix™ v2.9.1

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

DBN2PP - 5905 GlobalFiler™ - STRMix™

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

DHPAD7 - 5904 GlobalFiler™ - STRMix™ V2.6.3

2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7,7	10,12
	16,17	10			2	

DKCV2M - 5904 GlobalFiler™

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

DT7ZVN - 5905 GlobalFiler™ Express- STRMix™

2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7,7	10,12
	16,17	10			2	

DU2EN8 - 5904 Identifiler® Plus, PowerPlex® Fusion 6C, MiniFiler

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	7,8	13	18,20	7	10,12
	16,17	10	17	19		

DYUHBK - 5904 GlobalFiler™

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

FQDN9M - 5905 GlobalFiler™

2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7,7	10,12
	16,17	10			2	

FXD9BH - 5904 GlobalFiler™

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

FZHVNM - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7,7	10,12
	16,17	10			2	
G24YWK - 5904		PowerPlex® Fusion 6C- STRMix™ v2.9.0				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	7,8	13	18,20	7	10,12
	16,17	10	17	19		
GGKX2L - 5904		Identifiler® Plus - EuroForMix				
2		19,21		16,16	9,12	
	10,10	13,13			12,14	11,11
	15,16	12.2,14	30,32		X,Y	11,12
	23.2,24				7,7	10,12
	16,17					
GJNQVJ - 5904		NGMSelect- STRMix™				
2	11,17.3	19,21	12,14	16,16		
		13,13	14,14	18,19		11,11
	15,16	12.2,14	30,32	15,19	X,Y	
	23.2,24			18,20	7,7	
	16,17					
GKJ9WL - 5905		Identifiler® plus- STRMix™ v 2.7				
2		19,21		16,16	9,12	
	10,10	13,13			12,14	11,11
	15,16	12.2,14	30,32		X,Y	11,12
	23.2,24				7,7	10,12
	16,17					
GX7FUL - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
HKGYZM - 5905		PowerPlex® 21				
2	11,17.3	19,21		16,16	9,12	13,18
	10,10	13,13		18,19	12,14	11,11
	15,16	12.2,14	30,32		X,Y	11,12
	23.2,24	7,8	13,13		7,7	10,12
	16,17					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

J3QFZD - 5905 GlobalFiler™ - STRMix™ v2.9.1

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

JL7N2D - 5904 GlobalFiler™

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

JPNR9J - 5905 GlobalFiler™

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

JUL73Z - 5905 PowerPlex® 21- STRMix™ v 2.10

2	11,17.3	19,21		16,16	9,12	13,18
	10,10	13,13		18,19	12,14	11,11
	15,16	12.2,14	30,32		X,Y	11,12
	23.2,24	7,8	13,13		7,7	10,12
	16,17					

JYR46D - 5905 GlobalFiler™ - STRMix™ v2.9.1

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

K9ZQYY - 5905 PowerPlex® 21

2	11,17.3	19,21		16,16	9,12	13,18
	10,10	13,13		18,19	12,14	11,11
	15,16	12.2,14	30,32		X,Y	11,12
	23.2,24	7,8	13,13		7,7	10,12
	16,17					

L7KVQC - 5904 GlobalFiler™

2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

N7X8GF - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
QA8428 - 5904		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
QFEREA - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
QHGTE7 - 5904		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
RBHJQT - 5904		PowerPlex® Fusion 6C- STRMix™ 2.6				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	7,8	13	18,20	7	10,12
	16,17	10	17	19		
RJ7JZB - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
T6PLVB - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

TN6UVB - 5905		GlobalFiler™ - STRMix™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
U7DE86 - 5904		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
URYBLA - 5905		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
UTAD89 - 5905		GlobalFiler™ - STRMix™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
UX3CL6 - 5904		GlobalFiler™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
WFEJA7 - 5904		PowerPlex® Fusion6C- STRMix™ v2.9				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	7,8	13	18,20	7	10,12
	16,17	10	17	19		
WNAN48 - 5905		PowerPlex® Fusion6C - LRMixStudio				
2	11,17.3	19,21	12,14	16,16	9,12	
	10,10	13,13	14,14	18,19	12,14	11,11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	7,8	13,13	18,20	7,7	10,12
	16,17	10	17	19		

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 2 - STR Results

XJ9YZ6 - 5905		PowerPlex® Fusion 6C - DNAs				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24	7,8	13	18,20	7	10,12
	16,17	10	17	19		
YNL3LZ - 5904		GlobalFiler™ - STRMix™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
ZNHWKW - 5905		GlobalFiler™ - STRMix™ v2.9.1				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	
ZTPKXX - 5904		GlobalFiler™ - STRMix™				
2	11,17.3	19,21	12,14	16	9,12	
	10	13	14	18,19	12,14	11
	15,16	12.2,14	30,32	15,19	X,Y	11,12
	23.2,24			18,20	7	10,12
	16,17	10			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

2PKGL3 - 5905		GlobalFiler™ - STRMix™				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13	13,14,15	18,19	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11
	16,17,18	10,11			2	
3FYBNX - 5905		GlobalFiler™ - STRMix™ 2.8				
3	10,11,12,15,16.3,17.1,17.3	16,18,19,20,21,22	9,10,11,12,13,14	15,16,17,18	8,9,11,12,13	
	8,9,10,11	11,12,13,14,15	11,13,14,15	17,18,19,24,25	9,10,11,12,13,14	10,11,12
	13,14,15,16	11.2,12,12.2,13,14.15	28,29,30,31,32	14,15,16,17,18,19,20	X,Y	9,10,11,12
	20,21,22,22.2,23,23.2,24,25,26,27			16,26.2,27.2,28.2,17,17.2,18,19,19.2,20,25.2,26	6,7,9	8,10,11,12
	15,16,17,18	9,10,11			2	
3ZKZ6H - 5905		Identifiler® Plus- STRMix™ 2.7.0				
3		16,19,20,21,22		16,17,18	9,11,12,13	
	9,10,11	12,13,15			9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32		X,Y	10,11,12
	21,23.2,24,25,27				7,9	8,10,11,12
	16,17,18					
6BYVXE - 5905		PowerPlex® 21- STRMix™ v2.10.0				
3	11,12,15,17.3	16,19,20,21,22		16,17,18	9,11,12,13	11,13,17,18,19,20
	9,10,11	12,13,15		18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32		X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21		6,7,9	8,10,11,12
	16,17,18					
7Q4RNQ - 5905		GlobalFiler™ - STRMix™ v2.9.1				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	
7ZTBBC - 5904		PowerPlex® 21- STRMix™ 2.11				
3	11,12,15,17.3	16,19,20,21,22		16,17,18	9,12,13	11,13,17,18,19,20
	9,10,11	12,13,15		18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32		X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21		6,7,9	8,10,11,12
	16,17,18					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

8AD99V - 5905		GlobalFiler™ - STRMix™ 2.5.11				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	7,9	8,10,11,12
	16,17,18	10,11			2	
96BRBQ - 5904		PowerPlex® ESI- STRMix™ 2.7.0				
3	11,12,14,15,17.3,18.3	16,19,20,21,22	10,12,14	16,17,18		
		12,13,15	11,12,13,14,15	18,19,25		11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,16,17,18,19,20	X,Y	
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	
	16,17,18					
9A8E2U - 5904		NGM SElect™ - DNASTatistX v2.3.5.				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18		
		12,13,[14],15	11,13,14,15	18,19,[24],25		11,12
	13,14,15,16	12.2,13,14,15	29,30,[31],32	15,[16],17,[18],19	X,Y	
	21,23.2,24,25,[26],27			17,18,20,26.2,28.2	6,7,9	
	16,17,18					
AAQAC9 - 5905		PowerPlex® 21- STRMix™ 2.10.0				
3	11,12,15,17.3	16,19,20,21,22		16,17,18	9,11,12,13	11,13,17,18,19,20
	9,10,11	12,13,15		18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32		X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21		6,7,9	8,10,11,12
	16,17,18					
BDJ4FM - 5904		GlobalFiler™ - STRMix™ 2.6.1				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11,12	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,31,32	15,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	
BVLLQR - 5905		GlobalFiler™ - STRMix™				
3	10,11,12,15,16.3,17.3	16,18,19,20,21,22	10,11,12,14	15,16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	17,18,19,25	9,10,11,12,13,14	10,11,12
	13,14,15,16	11.2,12.2,13,14,15,16.2	29,30,31,32	14,15,16,17,18,19	X,Y	10,11,12
	21,22.2,23,23.2,24,25,27			17,18,19,20,25.2,26.2,27.2,28.2	6,7,9	8,10,11,12
	15,16,17,18	10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

BXR27B - 5904 GlobalFiler™ - STRMix™ 2.6.3

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

BY24RA - 5904 GlobalFiler™ - STRMix™

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,16,17,18,19,20	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

C3CKHP - 5905 PowerPlex® Fusion6C - CaseSolver, LRMixStudio, LabRetriever, DNAMView, EFM

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21	17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11	17	17,19,20		

C3G3FN - 5904 GlobalFiler™ - STRMix™

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

C4CGA9 - 5904 PowerPlex® Fusion 6C- STRMix™ v2.5.11

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,31,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21	17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11	17	17,19,20		

CHQN4K - 5905 GlobalFiler™ - STRMix™ v2.9.1

3	11,12,15,17.3	16,19,20,22	10,12,14	17	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,11,12
	16,17,18	10			2	

DBN2PP - 5905 GlobalFiler™ - STRMix™

3	10,11,12,15,16.3,17.3	16,18,19,20,21,22	10,11,12,13,14	15,16,17,18	9,11,12,13	
	9,10,11	12,13,15	10,11,13,14,15	17,18,19,24,25	9,10,11,12,14	10,11,12
	13,14,15,16	12,12.2,13,14,15	29,30,31,32	14,15,16,17,18,19	X,Y	10,11,12
	20,21,22.2,23,23.2,24,25,27			17,18,19,20,25.2,26.2,27.2,28.2	6,7,9	8,10,11,12
	15,16,17,18	10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

DHPAD7 - 5904 GlobalFiler™ - STRMix™ V2.6.3

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

DKCV2M - 5904 GlobalFiler™ - STRMix™

3	11,12,15,17.3	16,19,20,21,22	10,12,13.3,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

DT7ZVN - 5905 GlobalFiler™ - STRMix™

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,31,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

DU2EN8 - 5904 PowerPlex® Fusion 6C- STRMix™ V2.5.11

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,31,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21	17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11	17	17,19,20		

DYUHBK - 5904 GlobalFiler™ - STRMix™ 2.6.1

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

FQDN9M - 5905 GlobalFiler™ - STRMix™ 2.5.11

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,24,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

FXD9BH - 5904 GlobalFiler™ - STRMix™ 2.6.1

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,31,32	15,16,17,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

FZHVNM - 5905		GlobalFiler™ - STRMix™ v2.5.11				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	
G24YWK - 5904		PowerPlex® Fusion 6C- STRMix™ v2.9.0				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21	17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11	17	17,19,20		
GGKX2L - 5904		Identifiler® Plus - EuroForMix				
3		16,19,20,21,22		16,17,18	9,11,12,13	
	9,10,11	12,13,15			9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32		X,Y	10,11,12
	21,23.2,24,25,27				6,7,9	8,10,11,12
	16,17,18					
GJNQVJ - 5904		NGMSelect- STRMix™				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18		
		12,13,15	11,13,14,15	18,19,25		11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,18,19	X,Y	
	21,23.2,24,25,27			17,18,20,26.2,28.2	7,9	
	16,17,18					
GKJ9WL - 5905		Identifiler® plus- STRMix™ v 2.7				
3		16,18,19,20,21,22		15*,16,17,18	9,11,12,13	
	9,10,11	11*,12,13,15			9,10,11,12,14	10*,11,12
	13,14,15,16	12.2,13,14,15	29,30,32		X,Y	10,11,12
	21,23.2,24,25,27				6,7,9	8,10,11,12
	15*,16,17,18					
GX7FUL - 5905		GlobalFiler™ - STRMix™				
3	11,12,15,16.3,17.3	16,18,19,20,21,22	10,11,12,13,14	15,16,17,18	9,11,12,13	
	9,10,11	12,13,14,15	11,13,14,15	17,18,19,25	9,10,11,12,13,14	10,11,12
	13,14,15,16	11.2,12.2,13,14,15	29,30,32	14,15,16,17,18,19	X,Y	10,11,12
	20,21,22.2,23,23.2,24,25,27			17,18,19,20,26.2,27.2,28.2	6,7,9	8,10,11,12
	15,16,17,18	10,11			2	
HKGYZM - 5905		PowerPlex® 21- STRMix™ 2.10				
3	11,12,15,17.3	16,19,20,21,22		16,17,18	9,11,12,13	11,13,17,18,19,20
	9,10,11	12,13,15		18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32		X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21		6,7,9	8,10,11,12
	16,17,18					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

J3QFZD - 5905		GlobalFiler™ - STRMix™ v2.9.1				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	
JL7N2D - 5904		GlobalFiler™ - STRMix™ v 2.6				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	
JPNR9J - 5905		GlobalFiler™				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,31,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	
JUL73Z - 5905		PowerPlex® 21- STRMix™ V 2.10				
3	11,12,15,17.3	16,19,20,21,22		16,17,18	9,11,12,13	11,13,17,18,19,20
	9,10,11	12,13,15		18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32		X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21		6,7,9	8,10,11,12
	16,17,18					
K9ZQYY - 5905		PowerPlex® 21- STRMix™ 2.10				
3	11,12,15,17.3	16,19,20,21,22		16,17,18	9,11,12,13	11,13,17,18,19,20
	9,10,11	12,13,15		18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32		X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21		7,9	8,10,11,12
	16,17,18					
L7KVQC - 5904		GlobalFiler™ - STRMix™ 2.6.1				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,31,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	
N7X8GF - 5905		GlobalFiler™ - STRMix™				
3	11,12,15,17.3	16,18,19,20,21,22	10,11,12,13,14	15,16,17,18	9,11,12,13	
	9,10,11	11,12,13,15	11,13,14,15	17,18,19,25	9,10,11,12,14	10,11,12
	13,14,15,16	12.2,13,14,15	29,30,32	14,15,16,17,18,19	X,Y	9,10,11,12
	21,23,23.2,24,25,26,27			17,18,19,20,25.2,26.2,27.2,28.2	6,7,9	8,10,11,12
	15,16,17,18	10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

QA428 - 5904 GlobalFiler™ - STRMix™ v. 2.6

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

QFEREA - 5905 GlobalFiler™ - STRMix™ 2.8

3	10,11,12,15,16.3,17.3	16,18,19,20,21,22	9,10,11,12,13,14	15,16,17,18	8,9,10,11,12,13	
	8,9,10,11	11,12,13,14,15	11,13,14,15	17,18,19,24,25	9,10,11,12,13,14	10,11,12
	13,14,15,16	11.2,12,12.2,13,14.15	29,30,31,32	14,15,16,17,18,19,20	X,Y	9,10,11,12
	20,21,22,22.2,23,23.2,24,25,26,27			16,16.2,17,17.2,18.19,19.2,20,25.2,26,26.2,27.2,28,28.2	5,6,7,8,9	8,10,11,12
	15,16,17,18	9,10,11			2	

QHGT7 - 5904 GlobalFiler™ - STRMix™ 2.6

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,24,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,31,32	15,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

RBHJQT - 5904 PowerPlex® Fusion 6C- STRMix™ 2.6

3	11,12,[15],17.3	[16],19,20,[21],[22]	10,12,14	16,[17],[18]	9,[11],12,[13]	
	[9],10,11	12,13,[15]	[11],[13],14,[15]	18,19,[25]	[9],[10],11,12,14	11,[12]
	[13],14,15,16	12.2,13,14,[15]	[29],30,[31],[32]	15,[16],17,[18],19	X,Y	10,11,12
	[21],23.2,24,[25],[27]	2.2,7,8,9,[13]	[5],[9],[10],13,[21]	[17],18,20,26.2,28.2	[6],7,[9]	8,10,[11],12
	16,17,[18]	10,11	17	[17],19,20		

RJ7JZB - 5905 GlobalFiler™ - STRMix™

3	11,12,15,17.3	16,19,20,21,22	10,11,12,14	15,16,17,18	9,11,12,13	
	9,10,11	12,13,14,15	11,13,14,15	18,19,25	9,10,11,12,14	10,11,12
	13,14,15,16	12.2,13,14,15	29,30,32	14,15,16,17,18,19	X,Y	10,11,12
	20,21,22.2,23,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

T6PLVB - 5905 GlobalFiler™ - STRMix™

3	11,12,15,17.3	16,18,19,20,21,22	10,11,12,13,14	15,16,17,18	9,11,12,13	
	9,10,11	11,12,13,14,15	11,13,14,15	18,19,25	9,10,11,12,14	10,11,12
	13,14,15,16	12,12.2,13,14,15	29,30,32	14,15,16,17,18,19	X,Y	10,11,12
	21,22.2,23,23.2,24.25,26,27			17,18,19,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

TN6UVB - 5905 GlobalFiler™ - STRMix™

3	11,12,15,16.3,17.3	16,18,19,20,21,22	10,11,12,14	15,16,17,18	9,11,12,13	
	9,10,11	11,12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	10,11,12
	13,14,15,16	12,12.2,13,14,15	29,30,32	14,15,16,17,18,19	X,Y	10,11,12
	21,23,23.2,24,25,27			17,18,19,20,26.2,28.2	6,7,9	8,10,11,12
	15,16,17,18	10,11			2	

U7DE86 - 5904 GlobalFiler™ - STRMix™ 2.6.1

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,14,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

URYBLA - 5905 GlobalFiler™ - STRMix™

3	11,12,15,16.3,17.3	16,18,19,20,21,22	10,12,13,14	15,16,17,18	8,9,11,12,13	
	9,10,11	11,12,13,14,15	11,13,14,15	18,19,25	9,10,11,12,13,14	10,11,12
	13,14,15,16	11.2,12,12.2,13,14,15	29,30,31,32	14,15,16,17,18,19	X,Y	10,11,12
	20,21,23,23.2,24,25,26,27			17,18,20,26.2,27.2,28.2	6,7,9	8,10,11,12
	15,16,17,18	10,11			2	

UTAD89 - 5905 GlobalFiler™ - STRMix™

3	11,12,15,16.3,17.3	16,18,19,20,21,22	9,10,11,12,13,14	15,16,17,18	9,11,12,13	
	9,10,11	11,12,13,15	11,13,14,15	17,18,19,25	9,10,11,12,13,14	10,11,12
	13,14,15,16	12,12.2,13,14,15	29,30,31,32	14,15,16,17,18,19	X,Y	10,11,12
	20,21,22.2,23,23.2,24,25,26,27			17,18,19,20,26.2,27.2,28.2	6,7,9	8,10,11,12
	15,16,17,18	10,11			2	

UX3CL6 - 5904 GlobalFiler™ - STRMix™ V. 2.6

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,31**,32	15,16**,17,18**,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

WFEJA7 - 5904 PowerPlex® Fusion6C- STRMix™ v2.9

3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21	17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11	17	17,19,20		

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3 - STR Results

WNAN48 - 5905		PowerPlex® Fusion6c - LRmixStudio				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21	17,18,20,26.2,28.2	6,7	8,10,11,12
	16,17,18	10,11	17	17,19,20		
XJ9YZ6 - 5905		PowerPlex® Fusion 6C - DNAXs				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,16,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27	2.2,7,8,9,13	5,9,10,13,21	17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11	17	17,19,20		
YNL3LZ - 5904		GlobalFiler™ - STRMix™				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,18,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	4**,6,7,9	8,10,11,12
	16,17,18	10,11			2	
ZNHWKW - 5905		GlobalFiler™ - STRMix™ v2.9.1				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	
ZTPKXX - 5904		GlobalFiler™ - STRMix™ 2.6.1				
3	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,18**,19	X,Y	10,11,12
	21,23.2,24,25,26**,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3e - STR Results

4VL4UG - 5904 GlobalFiler™ - STRMix™

	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	NT
3e	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27	NT	NT	17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11	NT	NT	2	

AUXKFC - 5905 GlobalFiler™ - STRMix™ v 2.8.0

	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	NT
3e	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27	NT	NT	17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11	NT	NT	2	

JYR46D - 5905 GlobalFiler™ - STRMix™ v2.9.1

	11,12,15,17.3	16,19,20,21,22	10,12,14	16,17,18	9,11,12,13	
3e	9,10,11	12,13,15	11,13,14,15	18,19,25	9,10,11,12,14	11,12
	13,14,15,16	12.2,13,14,15	29,30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25,27			17,18,20,26.2,28.2	6,7,9	8,10,11,12
	16,17,18	10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 3sp - STR Results

4VL4UG - 5904 GlobalFiler™ - STRMix™

3sp	11,12,15,17.3	19,22	10,12,14	16,17	12	NT
	9,10,11	12,13,15	11,14,15	18,19	9,10,12,14	11,12
	14,15,16	12.2,13,14	30,32	15,17,19	X,Y	10,11,12
	21,23.2,24,25	NT	NT	18,20,28.2	6,7,8,9	8,10,11
	16,17,18	10,11	NT	NT	2	

AUXKFC - 5905 GlobalFiler™ - STRMix™ v 2.8.0

3sp	11,12,15,17.3	16,19,21	12,14	16,17,18	9,11,12	NT
	9,10,11	13,15	11,13,14	19	11,12,14	11,12
	14,15,16	12.2,13,14	30,32	15,17,19	X,Y	10,11,12
	21,24	NT	NT	17,18,20,26.2,28.2	6,7,9	10,12
	16,17	11	NT	NT	2	

JYR46D - 5905 GlobalFiler™ - STRMix™ v2.9.1

3sp	17.3	19,20,22	12,14	16,17,18	9,12	
	10,11	12,13,15	11,13,14,15	18,19,25	10,11	11
	13,14,15	14	30,32	15,17,19	X,Y	11
				17,18	7	8,10
	16,17	10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4 - STR Results

8AD99V - 5905 GlobalFiler™ - STRMix™ 2.5.11

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18 12,13
3

4	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

C3CKHP - 5905 PowerPlex® Fusion6C - CaseSolver, LRMixStudio, LabRetriever, DNAView, EFM

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18 12,13
3

4	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15	15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11	17	17,20		

FQDN9M - 5905 GlobalFiler™ - STRMix™ 2.5.11

12,14,15.3,16.3,17. 17,19,20,25 10,12,14 12,15,16,18 12,13
3

4	9,10,11	12,13,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,16,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7	6,8,11,12
	16,17,18	11			2	

FZHVNM - 5905 GlobalFiler™ - STRMix™ v2.5.11

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18 12,13
3

4	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

JPNR9J - 5905 GlobalFiler™

12,14,15.3,16.3,17. 16,17,19,20,24,25 10,12,13,14 12,15,16,18 12,13
3

4	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,13
	16,17,18	11			2	

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

2PKGL3 - 5905		GlobalFiler™ - STRMix™				
4e	14,16.3	16,17	10,12,13,14	14,15	11,12	
	10,11	12,13,14	13,14,16	17,23	11,12,13	10,11
	16,17	13,14	28	11,15	X	10,11,12
	21,22,24,25,26			16,17,27.2,28.2	6,7,8	6,8,11
	16,17					
3FYBNX - 5905		GlobalFiler™ - STRMix™ 2.8				
4e	11,12,13,14,14.3,15 .3,16.3,17.3	15,16,17,18,19,20, 24,25	9,10,11,12,13,14	11,12,14,15,16,17, 18	11,12,13	
	8,9,10,11	12,13,14,15	11,12,13,14,15,16	16,17,18,19,20,22,2 3,24,25	8,10,11,12,13	8,9,10,11,12
	12,13,14,15,16,17	11,12,13,14	27,28,29,30,30.2,3 1.2,32.2	11,14,15,16,17,18	X,Y	9,10,11,12
	19,20,21,22,23,24, 25,26			14,14.2,15,16,16.2 ,17,25.2,26,26.2,2 7.2,28,28.2	5,6,7,8	6,8,11,12
	15,16,17,18	10,11			2	
3ZKZ6H - 5905		Identifiler® Plus- STRMix™ 2.7.0				
4e		16,17,19,20,25		12,15,16,18	12,13	
	9,10,11	12,13,14,15			8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2		X,Y	10,11,12
	20,21,22,24,26				6,7,8	6,8,11,12
	16,17,18					
4VL4UG - 5904		GlobalFiler™ - STRMix™				
4e	12,14,15.3,16.3,17. 3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	NT
	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26	NT	NT	15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11	NT	NT	2	
6BYVXE - 5905		PowerPlex® 21- STRMix™ v2.10.0				
4e	12,14,15.3,16.3,17. 3	16,17,19,20,25		12,15,16,18	12,13	11,12,19,20
	9,10,11	12,13,14,15		17,19,20,23,25	8,11,12,13	11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2		X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15		6,7,8	6,8,11,12
	16,17,18					
7Q4RNQ - 5905		GlobalFiler™ - STRMix™ v2.9.1				
4e	12,14,15.3,16.3,17. 3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	10,11			2	

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

7ZTBBC - 5904 PowerPlex® 21- STRMix™ 2.11

12,14,15.3,16.3,17.3	16,17,19,20,25	12,15,16,18	12,13	11,12,19,20
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4e	9,10,11	12,13,14,15	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15	6,7,8	6,8,11,12
	16,17,18				

96BRBQ - 5904 PowerPlex® ESI

12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	
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4e	12,13,14,15	11,13,14,16	17,19,20,23,25	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	X,Y
	20,21,22,24,26		15,17,26.2,28.2	6,7,8
	16,17,18			

9A8E2U - 5904 NGM SElect™ - DNASTatistX v2.3.5.

12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	
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4e	12,13,14,15	11,13,14,[15],16,[19]	17,19,20,[22],23,[24],25	9,11,12
	13,14,16,17,[18]	12,13,14	28,29,30,31.2,32.2,[33.2]	X,Y
	20,21,22,24,26		[14.2],15,17,26.2,28.2	6,7,8
	16,17,18			

AAQAC9 - 5905 PowerPlex® 21- STRMix™ 2.10.0

12,14,15.3,16.3,17.3	16,17,19,20	12,15,16,18	12,13	11,12,19,20
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4e	9,10,11	12,13,14,15	17,19,20,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15	6,7,8	6,8,11,12
	16,17,18				

AUXKFC - 5905 GlobalFiler™

12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	NT
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4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26	NT	NT	15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11	NT	NT	2	

BDJ4FM - 5904 GlobalFiler™ - STRMix™ 2.6.1

12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13
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4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

BVLLQR - 5905		GlobalFiler™ - STRMix™				
	12,13,14,14.3,15.3, 16.3,17.3	16,17,18,19,20,24, 25	9,10,11,12,13,14	12,14,15,16,17,18	11,12,13	
4e	8,9,10,11	11,12,13,14,15	11,12,13,14,16	16,17,18,19,20,23,2 4,25	8,10,11,12,13	9,10,11,12
	13,14,15,16,17	12,13,14	28,29,30,31.2,32.2	11,14,15,16,17	X,Y	9,10,11,12
	19,20,21,22,23,24, 25,26			14,15,16,17,25.2,2 6.2,27.2,28.2	6,7,8	6,8,11,12
	15,16,17,18	11			2	
BXR27B - 5904		GlobalFiler™ - STRMix™ 2.6.3				
	12,14,15.3,16.3,17. 3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	
BY24RA - 5904		GlobalFiler™ - STRMix™				
	12,14,15.3,16.3,17. 3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,16,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	
C3G3FN - 5904		GlobalFiler™ - STRMix™				
	12,14,15.3,16.3,17. 3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	
C4CGA9 - 5904		PowerPlex® Fusion 6C- STRMix™ v2.5.11				
	12,14,15.3,16.3,17. 3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15	15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11	17	17,20		
CHQN4K - 5905		GlobalFiler™ - STRMix™ v2.9.1				
	12,14,15.3,16.3,17. 3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

DBN2PP - 5905 GlobalFiler™ - STRMix™

	12,13,14,15.3,16.3,17.3	15,16,17,19,20,24,25	10,12,13,14	12,14,15,16,17,18	11,12,13	
4e	8,9,10,11	12,13,14,15	11,12,13,14,15,16	16,17,19,20,22,23,25	8,10,11,12,13	9,10,11,12
	13,14,15,16,17	12,13,14	27,28,29,30,31.2,32.2	11,14,15,16,17	X,Y	10,11,12
	19,20,21,22,24,25,26			14,15,16,17,18,26.2,27.2,28.2	6,7,8	6,8,11,12
	15,16,17,18	11			2	

DHPAD7 - 5904 GlobalFiler™ - STRMix™ V2.6.3

	12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,12
	16,17,18	11			2	

DKCV2M - 5904 GlobalFiler™ - STRMix™

	12,14,15.3,16.3,17.3	16,17,19,20,25	10,11**,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,24**,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

DT7ZVN - 5905 GlobalFiler™ - STRMix™

	12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

DU2EN8 - 5904 PowerPlex® Fusion 6C- STRMix™ V2.5.11

	12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15	15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11	17	17,20		

DYUHBK - 5904 GlobalFiler™ - STRMix™ 2.6.1

	12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

FXD9BH - 5904 GlobalFiler™ - STRMix™ 2.6.1

12,14,15.3,16.3,17. 16,17,19,20,24**,2 10,12,13,14 12,15,16,18 12,13
3 5

4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,16,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

G24YWK - 5904 PowerPlex® Fusion 6C- STRMix™ v2.9.0

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18 12,13
3

4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15	15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11	17	17,20		

GGKX2L - 5904 Identifiler® Plus - EuroForMix

16,17,19,20,25 12,15,16,18 12,13

4e	9,10,11	12,13,14,15		8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	X,Y	10,11,12
	20,21,22,24,26			6,7,8	6,8,11,12
	16,17,18				

GJNQVJ - 5904 NGMselect

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18
3

4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	9,11
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y
	20,21,22,24,26			15,17,26.2,28.2	6,7,8
	16,17,18				

GKJ9WL - 5905 Identifiler® plus- STRMix™ v 2.7

16,17,19,20,25 12,14*,15,16,17*,1 11*,12,13
8

4e	9,10,11	12,13,14,15		8,10*,11,12,13	9,10*,11,12
	13,14,15*,16,17	12,13,14	27*,28,29,30,31.2,32.2	X,Y	10,11,12
	20,21,22,24,26			6,7,8	6,8,11,12
	15*,16,17,18				

GX7FUL - 5905 GlobalFiler™ - STRMix™

12,13,14,15.3,16.3, 16,17,18,19,20,24, 9,10,12,13,14 12,14,15,16,17,18 11,12,13
17.3 25

4e	9,10,11	12,13,14,15	11,12,13,14,16	17,19,20,23,25	8,10,11,12,13	9,10,11,12
	13,14,15,16,17	12,13,14	27,28,29,30,31.2,32.2	11,14,15,16,17	X,Y	10,11,12
	19,20,21,22,24,26			15,16,17,26.2,27.2,28.2	6,7,8	6,8,11,12
	15,16,17,18	11			2	

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

HKGYMZ - 5905 PowerPlex® 21- STRMix™ 2.10

	12,14,15.3,16.3,17.3	16,17,19,20,25		12,15,16,18	12,13	11,12,19,20
4e	9,10,11	12,13,14,15		17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2		X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15		6,7,8	6,8,11,12
	16,17,18					

J3QFZD - 5905 GlobalFiler™ - STRMix™ v2.9.1

	14,16.3	16,17,19	13,14	15	12	
4e	11	13,14	14,16	17,23	12,13	11
	14,17	14	28	11,15	X	11,12
	22,26			17,28.2	6,8	6,11
	16,17					

JL7N2D - 5904 GlobalFiler™ - STRMix™ v 2.6

	12,14,15.3,16.3,17.3	16,17,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23	8,11,12,13	9,11,12
	13,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

JUL73Z - 5905 PowerPlex® 21- STRMix™ v 2.10

	12,14,15.3,16.3,17.3	16,17,19,20,25		12,15,16,18	12,13	11,12,19,20
4e	9,10,11	12,13,14,15		17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2		X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15		6,7,8	6,8,11,12
	16,17,18					

JYR46D - 5905 GlobalFiler™ - STRMix™ v2.9.1

	12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

K9ZQYY - 5905 PowerPlex® 21- STRMix™ 2.10

	12,14,15.3,16.3,17.3	16,17,19,20,25		12,15,16,18	12,13	11,12,19,20
4e	9,10,11	12,13,14,15		17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2		X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15		6,7,8	6,8,11,12
	16,17,18					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

L7KVQC - 5904 GlobalFiler™ - STRMix™ 2.6.1

	14,16.3	16,17,19	10,13,14	15,18	12	
4e	9,11	13,14,15	14,16	17,23	8,12,13	11
	17	14	28,32.2	11,15,17	X,Y	11,12
	20,22,26			17,28.2	6,7,8	6,8,11
	16,17	11			2	

N7X8GF - 5905 GlobalFiler™ - STRMix™

	12,14,15.3,16.3,17.3	16,17,19,20,24,25	9,10,12,13,14	12,15,16,17,18	11,12,13	
4e	9,10,11	12,13,14,15	11,12,13,14,16	17,19,20,23,25	8,10,11,12,13	9,11,12
	13,14,15,16,17	12,13,14	28,29,30,31.2,32.2	11,14,15,16,17	X,Y	10,11,12
	20,21,22,24,26			14,15,17,25.2,26.2,27.2,28.2	6,7,8	6,8,11,12
	15,16,17,18	11			2	

QA8428 - 5904 GlobalFiler™ - STRMix™ v. 2.6

	12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

QFEREA - 5905 GlobalFiler™ - STRMix™ 2.8

	11,12,13,14,14.3,15.3,16.3,17.3	15,16,17,18,19,20,24,25	9,10,11,12,13,14,15	12,14,15,16,17,18	11,12,13	
4e	8,9,10,11	11,12,13,14,15	10,11,12,13,14,15,16	16,17,18,19,20,22,23,24,25	8,10,11,12,13	9,10,11,12
	13,14,15,16,17	11,12,13,14	27,28,29,30,30.2,31.2,32.2	10,11,14,15,16,17,18	X,Y	9,10,11,12,13
	19,20,21,22,23,24,25,26			14,14.2,15,16,16.2,17,18,25.2,26.2,27.2,28,28.2	5,6,7,8	6,7,8,10,11,12
	15,16,17,18	10,11			2	

QHGTET - 5904 GlobalFiler™ - STRMix™ 2.6

	12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	10*,11			2	

RBHJQT - 5904 PowerPlex® Fusion 6C- STRMix™ 2.6

	12,14,[15.3],16.3,[17.3]	16,17,19,20,25	10,[12],13,14	[12],15,16,18	12,[13]	
4e	9,[10],11	[12],13,[14],[15]	[11],13,14,[16]	17,[19],[20],23,[25]	[8],11,12,13	[9],11,[12]
	[13],[14],16,17	[12],[13],14	28,[29],30,31.2,[32.2]	[11],15,[16],[17]	X,[Y]	[10],11,12
	[20],21,22,[24],[26]	2.2,[5],9,[12]	[9],10,[14],[15]	15,17,26.2,28.2	6,7,[8]	[6],8,[11],[12]
	16,17,[18]	11	17	17,20		

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

RJ7JZB - 5905		GlobalFiler™ - STRMix™				
	12,14,14.3,15.3,16.3,17.3	16,17,19,20,24,25	9,10,12,13,14	12,15,16,17,18	11,12,13	
4e	9,10,11	12,13,14,15	11,12,13,14,16	17,19,20,23,25	8,10,11,12,13	9,10,11,12
	13,14,15,16,17	11,12,13,14	28,29,30,31.2,32.2	11,14,15,16,17,18	X,Y	10,11,12
	19,20,21,22,23,24,26			14,15,16,17,26.2,27.2,28.2	6,7,8	6,8,11,12
	15,16,17,18	11			2	
T6PLVB - 5905		GlobalFiler™ - STRMix™				
	12,14,15.3,16.3,17.3	16,17,19,20,24,25	10,12,13,14	12,15,16,17,18	11,12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,23,24,26			15,16,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	
TN6UVB - 5905		GlobalFiler™ - STRMix™				
	12,14,15.3,16.3,17.3	16,17,19,20,24,25	9,10,11,12,13,14,15	11,12,14,15,16,17,18	11,12,13	
4e	8,9,10,11	12,13,14,15	11,12,13,14,16	17,19,20,23,24,25	8,10,11,12,13	9,10,11,12
	13,14,15,16,17	11,12,13,14	28,29,30,31.2,32.2	11,14,15,16,17	X,Y	10,11,12
	19,20,21,22,24,26			14,15,16,17,26.2,27.2,28.2,29.2	6,7,8	6,8,11,12
	15,16,17,18	11			2	
U7DE86 - 5904		GlobalFiler™ - STRMix™ 2.6.1				
	12,14,15.3,16.3,17.3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,24,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	
URYBLA - 5905		GlobalFiler™ - STRMix™				
	12,14,15.3,16.3,17.3	16,17,19,20,24,25	10,12,13,14	12,14,15,16,18	11,12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,31.2,32.2	11,14,15,16,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,27.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	
UTAD89 - 5905		GlobalFiler™ - STRMix™				
	11,12,14,15.3,16.3,17.3	16,17,18,19,20,24,25	9,10,11,12,13,14,15	11,12,14,15,16,17,18	11,12,13	
4e	8,9,10,11	11,12,13,14,15	11,12,13,14,16	16,17,18,19,20,23,24,25	8,10,11,12,13	9,10,11,12
	12,13,14,15,16,17	11,12,13,14	28,29,30,30.2,31.2,32.2	11,14,15,16,17	X,Y	10,11,12
	19,20,21,22,23,24,25,26			14,15,16,17,25.2,26.2,27.2,28.2	5,6,7,8	6,7,8,11,12
	15,16,17,18	11			2	

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

UX3CL6 - 5904 GlobalFiler™ - STRMix™ V. 2.6

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18 12,13
3

4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	10,11			2	

WFEJA7 - 5904 PowerPlex® Fusion6C- STRMix™ v2.9

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18 12,13
3

4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15	15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11	17	17,20		

WNAN48 - 5905 PowerPlex® Fusion6C - LRmixStudio

12,14,15.3,16.3,17. 16,17,19,20,25 10,11,12,13,14 12,15,16,18 12,13
3

4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,16,17	X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15	15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11	17	17,20		

XJ9YZ6 - 5905 PowerPlex® Fusion 6C - DNAXs

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18 12,13
3

4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26	2.2,5,9,12	9,10,14,15	15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11	17,[18]	17,20		

YNL3LZ - 5904 GlobalFiler™ - STRMix™

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18 12,13
3

4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

ZNHWKW - 5905 GlobalFiler™ - STRMix™ v2.9.1

12,14,15.3,16.3,17. 16,17,19,20,25 10,12,13,14 12,15,16,18 12,13
3

4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4e - STR Results

ZTPKXX - 5904 GlobalFiler™ - STRMix™ 2.6.1

	12,14,15,3,16,3,17, 3	16,17,19,20,25	10,12,13,14	12,15,16,18	12,13	
4e	9,10,11	12,13,14,15	11,13,14,16	17,19,20,23,25	8,11,12,13	9,11,12
	13,14,16,17	12,13,14	28,29,30,31.2,32.2	11,15,17	X,Y	10,11,12
	20,21,22,24,26			15,17,26.2,28.2	6,7,8	6,8,11,12
	16,17,18	11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4sp - STR Results

2PKGL3 - 5905		GlobalFiler™ - STRMix™				
4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	12,13	13	17,20	8,11	9,12
	13,16	12,13,14	31,2,32,2	15	X,Y	11,12
	19,20,21,22			15,17	6,7	8,12
	16,18	11			2	
3FYBNX - 5905		GlobalFiler™ - STRMix™ 2.8				
4sp	14,3,15,1,15,3,16,1,16,3	16,17,23,24,25	9,10,13,14,15	11,12,17,18	11,12,13	
	8,9,10	12,13,14	12,13	16,17,19,20	7,8,10,11,12	8,9,11,12
	12,13,15,16	11,12,13,14	30,2,31,2,32,2,33,2	13,14,15,16	X,Y	10,11,12
	19,20,21,22			14,14,2,15,16,16,2,17	5,6,7	7,8,11,12
	15,16,17,18	10,11			2	
3ZKZ6H - 5905		Identifiler® Plus- STRMix™ 2.7.0				
4sp		17,25		12,18	12,12	
	9,10	13,13			8,11	9,12
	13,16	12,14	31,2,32,2		X,Y	11,12
	20,22				6,7	8,12
	16,18					
4VL4UG - 5904		GlobalFiler™ - STRMix™				
4sp	15,3,16,3	17,25	10,14	12,18	12	NT
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22	NT	NT	15,17	6,7	8,12
	16,18	11	NT	NT	2	
6BYVXE - 5905		PowerPlex® 21- STRMix™ v2.10.0				
4sp	15,3,16,3	17,25		12,18	12,12	11,12
	9,10	13,13		17,20	8,11	9,12
	13,16	12,14	31,2,32,2		X,Y	11,12
	20,22	9,12	10,14		6,7	8,12
	16,18					
7Q4RNQ - 5905		GlobalFiler™ - STRMix™ v2.9.1				
4sp	15,3,16,3	17,25	10,14	12,18	12,12	
	9,10	13,13	13,13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15,15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

TABLE 3

WebCode - Test Amplification Kits - Probabilistic Genotyping Software						
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4sp - STR Results

7ZTBBC - 5904 PowerPlex® 21- STRMix™ 2.11

4sp	15,3,16,3	17,25		12,18	12,12	11,12
	9,10	13,13		17,20	8,11	9,12
	13,16	12,14	31,2,32,2		X,Y	11,12
	20,22	9,12	10,14		6,7	8,12
	16,18					

96BRBQ - 5904 PowerPlex® ESI

4sp	15,3,16,3	17,25	10,14	12,18		
		13,13	13,13	17,20		9,12
	13,16	12,14	31,2,32,2	15,15	X,Y	
	20,22			15,17	6,7	
	16,18					

9A8E2U - 5904 NGM SElect™ - DNASTatistX v2.3.5.

4sp	15,3,16,3	17,25	10,14	12,18		
		13	13	17,20		9,12
	13,16	12,14	31,2,32,2	15	X,Y	
	20,22			15,17	6,7	
	16,18					

AAQAC9 - 5905 PowerPlex® 21- STRMix™ 2.10.0

4sp	15,3,16,3	17,25		12,16,18	12,12	11,12
	9,10	13		17,20	8,11	9,11,12
	13,14,16	12,13,14	31,2,32,2		X,Y	11,12
	20,22	2,2,9,12	10,14		6,7	8,11,12
	16,17,18					

AUXKFC - 5905 GlobalFiler™

4sp	15,3,16,3	17,25	10,14	12,18	12	NT
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22	NT	NT	15,17	6,7	8,12
	16,18	11	NT	NT	2	

BDJ4FM - 5904 GlobalFiler™ - STRMix™ 2.6.1

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

BVLLQR - 5905 GlobalFiler™ - STRMix™

4sp	14,3,15,3,16,3	16,17,24,25	9,10,13,14	11,12,17,18	11,12	
	8,9,10	12,13	12,13	16,17,19,20	8,10,11	8,9,11,12
	12,13,15,16	11,12,13,14	30,2,31,2,32,2	14,15,16	X,Y	10,11,12
	19,20,21,22			14,15,16,17	6,7	8,11,12
	15,16,17,18	11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4sp - STR Results

BXR27B - 5904 GlobalFiler™ - STRMix™ 2.6.3

4sp	15,3,16,3	17,25	10,14	12,18	12,12	
	9,10	13,13	13,13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15,15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

BY24RA - 5904 GlobalFiler™ - STRMix™

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

C3G3FN - 5904 GlobalFiler™ - STRMix™

4sp	15,3,16,3	17,25	10,14	12,18	12,12	
	9,10	13,13	13,13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15,15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

C4CGA9 - 5904 PowerPlex® Fusion 6C- STRMix™ v2.5.11

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22	9,12	10,14	15,17	6,7	8,12
	16,18	11	17	17		

CHQN4K - 5905 GlobalFiler™ - STRMix™ v2.9.1

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

DBN2PP - 5905 GlobalFiler™ - STRMix™

4sp	14,3,15,3,16,3	16,17,24,25	9,10,13,14	11,12,17,18	11,12	
	9,10	12,13	12,13	16,17,19,20	8,10,11	8,9,11,12
	12,13,15,16	11,12,13,14	30,2,31,2,32,2	14,15,16	X,Y	10,11,12
	19,20,21,22,23			14,15,16,17	6,7	8,12
	15,16,17,18	11			2	

DHPAD7 - 5904 GlobalFiler™ - STRMix™ V2.6.3

4sp	15,3,16,3	17,25	10,14	12,18	12,12	
	9,10	13,13	13,13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15,15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4sp - STR Results

DKCV2M - 5904 GlobalFiler™ - STRMix™

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

DT7ZVN - 5905 GlobalFiler™ - STRMix™

4sp	15,3,16,3	17,25	10,14	12,18	12,12	
	9,10	13,13	13,13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15,15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

DU2EN8 - 5904 PowerPlex® Fusion 6C- STRMix™ V2.5.11

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22	9,12	10,14	15,17	6,7	8,12
	16,18	11	17	17		

DYUHBK - 5904 GlobalFiler™ - STRMix™ 2.6.1

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

FXD9BH - 5904 GlobalFiler™ - STRMix™ 2.6.1

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2,33,2**	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

G24YWK - 5904 PowerPlex® Fusion 6C- STRMix™ v2.9.0

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22	9,12	10,14	15,17	6,7	8,12
	16,18	11	17	17		

GGKX2L - 5904 Identifiler® Plus - EuroForMix

4sp		17,25		12,18	12,12	
	9,10	13,13			8,11	9,12
	13,16	12,14	31,2,32,2		X,Y	11,12
	20,22				6,7	8,12
	16,18					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4sp - STR Results

GJNQVJ - 5904 NGMselect

	15.3,16.3	17,25	10,14	12,18		
4sp		13	13	17,20		9,12
	13,16	12,14	31.2,32.2,33.2	15	X,Y	
	20,22			15,17	6,7	
	16,18					

GKJ9WL - 5905 Identifiler® plus- STRMix™ v 2.7

		16*,17,24*,25		11*,12,17*,18	11*,12	
4sp	8*,9,10	12*,13			8,10*,11	8*,9,11*,12
	12*,13,15*,16	12,13*,14	30.2*,31.2,32.2		X,Y	10*,11,12
	20,21*,22				6,7	8,11*,12
	15*,16,17*,18					

GX7FUL - 5905 GlobalFiler™ - STRMix™

	14.3,15.3,16.3	16,17,24,25	9,10,13,14	11,12,17,18	11,12	
4sp	8,9,10	12,13	12,13	17,19,20	8,10,11	8,9,11,12
	12,13,15,16	11,12,13,14	30.2,31.2,32.2	14,15,16	X,Y	10,11,12
	19,20,21,22			14,15,16,17	6,7	8,11,12
	15,16,17,18	11			2	

HKGYZM - 5905 PowerPlex® 21- STRMix™ 2.10

	15.3,16.3	17,25		12,18	12	11,12
4sp	9,10	13,13		17,20	8,11	9,12
	13,16	12,14	31.2,32.2		X,Y	11,12
	20,22	2.2,9,12	10,14		6,7	8,12
	16,18					

J3QFZD - 5905 GlobalFiler™ - STRMix™ v2.9.1

	15.3,16.3	17,25	10,14	12,18	12	
4sp	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31.2,32.2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

JL7N2D - 5904 GlobalFiler™ - STRMix™ v 2.6

	15.3,16.3	17,25	10,14	12,18	12	
4sp	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31.2,32.2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

JUL73Z - 5905 PowerPlex® 21- STRMix™ v 2.10

	15.3,16.3	17,19,25		12,18	12,12	11,12
4sp	9,10	13,13		17,20	8,11	9,12
	13,16	12,14	31.2,32.2		X,Y	11,12
	20,22	9,12	10,14		6,7	8,12
	16,18					

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4sp - STR Results

JYR46D - 5905 GlobalFiler™ - STRMix™ v2.9.1

4sp	15.3,16.3	17,25	10,14	12,16,18	12	
	9,10,11	13,15	11,13	17,19,20	8,11,12	9,11,12
	13,14,16	12,14	28,29,30,31.2,32.2	15	X,Y	10,11,12
	20,22			15,17	6,7	8,12
	16,17,18	11			2	

K9ZQYY - 5905 PowerPlex® 21- STRMix™ 2.10

4sp	15.3,16.3	17,25		12,18	12,12	11,12
	9,10	13,13		17,20	8,11	9,12
	13,16	12,14	31.2,32.2		X,Y	11,12
	20,22	9,12	10,14		6,7	8,12
	16,18					

L7KVQC - 5904 GlobalFiler™ - STRMix™ 2.6.1

4sp	14,15.3,16.3	16,17,24**,25	10,13,14	12,15,18	12	
	9,10,11	13,14	13,14,15**,16	17,20,23	8,11,12,13	9,11,12
	13,16,17	12,14	28,31.2,32.2	11,15	X,Y	11,12
	20,22,26			15,17,28.2	6,7,8	6,8,11,12
	16,17,18	9**,11			2	

N7X8GF - 5905 GlobalFiler™ - STRMix™

4sp	14.3,15.3,16.3	16,17,24,25	9,10,13,14	11,12,17,18	11,12	
	9,10	12,13	12,13	16,17,19,20	7,8,10,11	9,11,12
	13,15,16	11,12,13,14	31.2,32.2	14,15,16	X,Y	10,11,12
	19,20,21,22			14,15,16,17	6,7	8,12
	15,16,17,18	11			2	

QA8428 - 5904 GlobalFiler™ - STRMix™ v. 2.6

4sp	15.3,16.3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31.2,32.2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

QFEREA - 5905 GlobalFiler™ - STRMix™ 2.8

4sp	14.3,15.1,15.3,16.1,16.3	16,17,23,24,25	9,10,11,13,14,15	11,12,17,18,19	10,11,12,13	
	8,9,10,11	12,13,14	12,13	16,17,19,20	7,8,9,10,11,12	8,9,11,12
	12,13,15,16	11,12,13,14	30.2,31.2,32.2,33.2	13,14,15,16	X,Y	10,11,12,13
	19,20,21,22,23			14,14.2,15,16,16.2,17,18	5,6,7	7,8,11,12
	15,16,17,18,19	9,10,11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4sp - STR Results

QHGTE7 - 5904 GlobalFiler™ - STRMix™ 2.6

4sp	15.3,16.3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31.2,32.2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

RBHJQT - 5904 PowerPlex® Fusion 6C- STRMix™ 2.6

4sp	15.3,16.3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31.2,32.2	15	X,Y	11,12
	20,22	9,12	10,14	15,17	6,7	8,12
	16,18	11	17	17		

RJ7JZB - 5905 GlobalFiler™ - STRMix™

4sp	14.3,15.3,16.3	16,17,24,25	9,10,13,14	12,17,18	11,12	
	9,10	12,13	12,13	17,19,20	8,10,11	9,11,12
	13,16	11,12,13,14	30.2,31.2,32.2	14,15,16	X,Y	10,11,12
	19,20,21,22			14,15,16,17	6,7	8,12
	16,17,18	11			2	

T6PLVB - 5905 GlobalFiler™ - STRMix™

4sp	15.3,16.3	16,17,25	9,10,13,14	12,17,18	11,12	
	9,10	12,13	12,13	17,20	8,11	9,12
	13,16	11,12,13,14	31.2,32.2	14,15	X,Y	11,12
	19,20,21,22,23			14,15,16,17	6,7	8,12
	16,17,18	11			2	

TN6UVB - 5905 GlobalFiler™ - STRMix™

4sp	14.3,15.3,16.3	16,17,24,25	9,10,13,14	11,12,17,18	11,12	
	8,9,10	12,13	12,13	16,17,19,20	8,10,11	8,9,11,12
	12,13,15,16	11,12,13,14	30.2,31.2,32.2	14,15,16	X,Y	10,11,12
	19,20,21,22			14,15,16,17	6,7	8,12
	15,16,17,18	11			2	

U7DE86 - 5904 GlobalFiler™ - STRMix™ 2.6.1

4sp	15.3,16.3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,10**,12
	13,16	12,14	31.2,32.2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18,19**	11			2	

URYBLA - 5905 GlobalFiler™ - STRMix™

4sp	14.3,15.3,16.3	16,17,24,25	9,10,13,14	11,12,17,18	11,12	
	8,9,10	12,13	12,13,14	16,17,19,20	8,10,11	8,9,11,12
	12,13,15,16	11,12,13,14	30.2,31.2,32.2	14,15,16	X,Y	10,11,12
	19,20,21,22			14,15,16,17	6,7	8,11,12
	15,16,17,18	11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4sp - STR Results

UTAD89 - 5905 GlobalFiler™ - STRMix™

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	12,13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	19,20,21,22			14,15,16,17	6,7	8,12
	16,18	11			2	

UX3CL6 - 5904 GlobalFiler™ - STRMix™ V. 2.6

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

WFEJA7 - 5904 PowerPlex® Fusion6C- STRMix™ v2.9

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22	9,12	10,14	15,17	6,7	8,12
	16,18	11	17	17		

WNAN48 - 5905 PowerPlex® Fusion6C - LRmixStudio

4sp	15,3,16,3	17,20	10,14	12,18	12,12	
	9,10	13,13	13,13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15,15	X,Y	11,12
	20,22	9,12	10,14	15,17	6,7	8,12
	16,18	11	17	17		

XJ9YZ6 - 5905 PowerPlex® Fusion 6C - DNAXs

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22	9,12	10,14	15,17	6,7	8,12
	16,18	11	17	17		

YNL3LZ - 5904 GlobalFiler™ - STRMix™

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	10**,11			2	

ZNHWKW - 5905 GlobalFiler™ - STRMix™ v2.9.1

4sp	15,3,16,3	17,25	10,14	12,18	12	
	9,10	13	13	17,20	8,11	9,12
	13,16	12,14	31,2,32,2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11			2	

TABLE 3

WebCode - Test		Amplification Kits - Probabilistic Genotyping Software				
Item	D1S1656	D2S1338	D2S441	D3S1358	D5S818	D6S1043
	D7S820	D8S1179	D10S1248	D12S391	D13S317	D16S539
	D18S51	D19S433	D21S11	D22S1045	Amelogenin	CSF1PO
	FGA	Penta D	Penta E	SE33	TH01	TPOX
	vWA	DYS391	DYS570	DYS576	Y Indel	

Item 4sp - STR Results

ZTPKXX - 5904 GlobalFiler™ - STRMix™ 2.6.1

	15,3,16.3	17,25	10,14	12,18	12	
4sp	9,10,11**	13	13	17,20	8,11	9,12
	13,16	12,14	31.2,32.2	15	X,Y	11,12
	20,22			15,17	6,7	8,12
	16,18	11,12			2	

YSTR Amplification Kit(s) & Results

TABLE 4

WebCode - Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	YGATAH4
Item 2 - YSTR Results									
3ZKZ6H - 5905	PowerPlex® Y 23								
2	16	16,18	13	30	21	10	11	15	
	14	11	13	21	16	16		24	
	12	11	17	19		21	13	11	
8AD99V - 5905	Yfiler® Plus								
2	38,38	16	16,18	13	30	21	10	11	15
	14	11	13	21	32	16	16	10	24
	41	12	17	19	20	21			11
AAQAC9 - 5905	Yfiler® Plus								
2	38	16	16,18	13	30	21	10	11	15
	14	11	13	21	32	16	16	10	24
	41	12	17	19	20	21			11
BXR27B - 5904	Yfiler® Plus								
2	38,38	16	16,18	13	30	21	10	11	15
	14	11	13	21	32	16	16	10	24
	41	12	17	19	20	21			11
C3CKHP - 5905	Yfiler® Plus								
2	38	16	16,18	13	30	21	10	11	15
	14	11	13	21	32	16	16	10	24
	41	12	17	19	20	21			11
C4CGA9 - 5904	Yfiler®								
2	16	16,18	13	30	21	10	11	15	
	14	11	13	21	16	16			
						21		11	
DHPAD7 - 5904	Yfiler® Plus								
2	38,38	16	16,18	13	30	21	10	11	15
	14	11	13	21	32	16	16	10	24
	41	12	17	19	20	21			11
DU2EN8 - 5904	Yfiler®								
2	16	16,18	13	30	21	10	11	15	
	14	11	13	21	16	16			
						21		11	
FQDN9M - 5905	Yfiler® Plus								
2	38,38	16	16,18	13	30	21	10	11	15
	14	11	13	21	32	16	16	10	24
	41	12	17	19	20	21			11
FZHVNM - 5905	Yfiler® Plus								
2	38,38	16	16,18	13	30	21	10	11	15
	14	11	13	21	32	16	16	10	24
	41	12	17	19	20	21			11
GGKX2L - 5904	Yfiler®								
2	16	16,18	13	30	21	10	11	15	
	14	11	13	21	16	16			
						21		11	

TABLE 4

WebCode - Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	YGATAH4

Item 2 - YSTR Results

GJNQVJ - 5904		PowerPlex® Y 23							
2		16	16,18	13	30	21	10	11	15
	14	11	13	21		16	16		24
		12	11	17	19		21	13	11
HKGYMZ - 5905		Yfiler® Plus							
2	38	16	16,18	13	30	21	10	11	15
	14	11	13	21	32	16	16	10	24
	41	12		17	19	20	21		11
JPNR9J - 5905		PowerPlex® Y 23							
2		16	16,18	13	30	21	10	11	15
	14	11	13	21		16	16		24
		12	11	17	19		21	13	11
K9ZQYY - 5905		Yfiler® Plus							
2	38,38	16	16,18	13	30	21	10	11	15
	14	11	13	21	32	16	16	10	24
	41	12		17	19	20	21		11
RBHJQT - 5904		PowerPlex® Y 23							
2		16	16,18	13	30	21	10	11	15
	14	11	13	21		16	16		24
		12	11	17	19		21	13	11
WNAN48 - 5905		PowerPlex® Y 23							
2		16	16,18	13	30	21	10	11	15
	14	11	13	21		16	16		24
		12	11	17	19		21	13	11

TABLE 4

WebCode - Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	YGATAH4
Item 3 - YSTR Results									
3ZKZ6H - 5905	PowerPlex® Y 23								
3		13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21		15,16	16,17,18		22,24,25
		10,12	11,12,13	17	17,19,20		21,23,24	11,13	11,12
8AD99V - 5905	Yfiler® Plus								
3	35,37,38,3	13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21	29,32,33	15,16	16,17,18	10,11	22,24,25
	39,41	10,12		17	17,19,20	20,24	21,23,24		11,12
AAQAC9 - 5905	Yfiler® Plus								
3	35,37,38,3	13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21	29,32,33	15,16	16,17,18	10,11	22,24,25
	39,41	10,12		17	17,19,20	20,24	21,23,24		11,12
BXR27B - 5904	Yfiler® Plus								
3	35,37,38,3	13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21	29,32,33	15,16	16,17,18	10,11	22,24,25
	39,41	10,12		17	17,19,20	20,24	21,23,24		11,12
C3CKHP - 5905	Yfiler® Plus								
3	35,37,38,3	13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21	29,32,33	15,16	16,17,18	10,11	22,24,25
	39,41	10,12		17	17,19,20	20,24	21,23,24		11,12
C4CGA9 - 5904	Yfiler®								
3		13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21		15,16	16,17,18		
							21,23,24		11,12
DHPAD7 - 5904	Yfiler® Plus								
3	35,37,38,3	13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21	29,32,33	15,16	16,17,18	10,11	22,24,25
	39,41	10,12		17	17,19,20	20,24	21,23,24		11,12
DU2EN8 - 5904	Yfiler®								
3		13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21		15,16	16,17,18		
							21,23,24		11,12
FZHVNM - 5905	Yfiler® Plus								
3	35,37,38,3	13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21	29,32,33	15,16	16,17,18	10,11	22,24,25
	39,41	10,12		17	17,19,20	20,24	21,23,24		11,12
GGKX2L - 5904	Yfiler®								
3		13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21		15,16	16,17,18		
							21,23,24		11,12

TABLE 4

WebCode - Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	YGATAH4

Item 3 - YSTR Results

GJNQVJ - 5904		PowerPlex® Y 23							
3		13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21		15,16	16,17,18		22,24,25
		10,12	11,12,13	17	17,19,20		21,23,24	11,13	11,12
HKGYMZ - 5905		Yfiler® Plus							
3	35,37,38,3	13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21	29,32,33	15,16	16,17,18	10,11	22,24,25
	39,41	10,12		17	17,19,20	20,24	21,23,24		11,12
JPNR9J - 5905		PowerPlex® Y 23							
3		13,14,16	11,14,16, 17,18	13	29,30	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21		15,16	16,17,18		22,24,25
		10,12	11,12,13	17	17,19,20		21,23,24	11,13	11,12
K9ZQYY - 5905		Yfiler® Plus							
3	35,37,38,3	13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21	29,32,33	15,16	16,17,18	10,11	22,24,25
	39,41	10,12		17	17,19,20	20,24	21,23,24		11,12
RBHJQT - 5904		PowerPlex® Y 23							
3		[13],14,16	11,14,16, 17,18	13	29,30	21,24	10,11	11,14	13,15
	14,[15]	[10],11,12	12,13	19,21		[15],16	16,[17],18		22,24,[25]
		[10],12	11,12,13	17	[17],19,20		21,[23],24	[11],13	11,12
WNAN48 - 5905		PowerPlex® Y 23							
3		13,14,16	11,14,16, 17,18	13	29,30,31	21,24	10,11	11,14	13,15
	14,15	10,11,12	12,13	19,21		15,16	16,17,18		22,24,25
		10,12	11,12,13	17	17,19,20		21,23,24	11,13	11,12

TABLE 4

WebCode - Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	YGATAH4

Item 4 - YSTR Results

8AD99V - 5905		Yfiler® Plus							
4	35,37	14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19	29,30	16,18	17,18	10,11	22
	37,39	12,14		17	17,20	21,24	23,24		12
C3CKHP - 5905		Yfiler® Plus							
4	35,37	14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19	29,30	16,18	17,18	10,11	22
	37,39	12,14		17	17,20	21,24	23,24		12
FZHVNM - 5905		Yfiler® Plus							
4	35,37	14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19	29,30	16,18	17,18	10,11	22
	37,39	12,14		17	17,20	21,24	23,24		12
JPNR9J - 5905									
4		14	11,14	13	29	21,24	11	13,14	13
		15	12	12	19	16,18	17,18		22
		12,14	12,13	17	17,20		23,24	10,11	12

TABLE 4

WebCode - Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	YGATAH4

Item 4e - YSTR Results

3ZKZ6H - 5905		PowerPlex® Y 23							
4e		14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19		16,18	17,18		22
		12,14	12,13	17	17,20		23,24	10,11	12
AAQAC9 - 5905		Yfiler® Plus							
4e	35,37	14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19	29,30	16,18	17,18	10,11	22
	37,39	12,14		17	17,20	21,24	23,24		12
BXR27B - 5904		Yfiler® Plus							
4e	35,37	14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19	29,30	16,18	17,18	10,11	22
	37,39	12,14		17	17,20	21,24	23,24		12
C4CGA9 - 5904		Yfiler®							
4e		14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19		16,18	17,18		
							23,24		12
DHPAD7 - 5904		Yfiler® plus							
4e	35,37	14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19	29,30	16,18	17,18	10,11	22
	37,39	12,14		17	17,20	21,24	23,24		12
DU2EN8 - 5904		Yfiler®							
4e		14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19		16,18	17,18		
							23,24		12
GGKX2L - 5904		Yfiler®							
4e		14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19		16,18	17,18		
							23,24		12
HKGYZM - 5905		Yfiler® Plus							
4e	35,37	14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19	29,30	16,18	17,18	10,11	22
	37,39	14		17	20	21,24	23,24		12
K9ZQYY - 5905		Yfiler® Plus							
4e	35,37	14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19	29,30	16,18	17,18	10,11	22
	37,39	12		17	17,20	21,24	23,24		12
RBHJQT - 5904		PowerPlex® Y 23							
4e		14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19		16,18	17,18		22
		12,14	12,13	17	17,20		23,24	[10],11	12
WNAN48 - 5905		PowerPlex® Y 23							
4e		14	11,14	13	29	21,24	11	13,14	13
	15	12	12	19		16,18	17,18		22
		12,14	12,13	17	17,20		23,24	10,11	12

TABLE 4

WebCode - Test		Amplification Kit							
Item	DYF387S1	DYS19	DYS385	DYS389-I	DYS389-II	DYS390	DYS391	DYS392	DYS393
	DYS437	DYS438	DYS439	DYS448	DYS449	DYS456	DYS458	DYS460	DYS481
	DYS518	DYS533	DYS549	DYS570	DYS576	DYS627	DYS635	DYS643	YGATAH4

Item 4sp - YSTR Results

3ZKZ6H - 5905		PowerPlex® Y 23							
4sp		14	11,14	13	29	21	11	13	13
	15	12	12	19		18	17		22
		14	12	17	17		23	10	12
AAQAC9 - 5905		Yfiler® Plus							
4sp	35	14	11,14	13	29	21	11	13	13
	15	12	12	19	30	18	17	10	22
	37	14		17	17	21	23		12
BXR27B - 5904		Yfiler® Plus							
4sp	35,35	14	11,14	13	29	21	11	13	13
	15	12	12	19	30	18	17	10	22
	37	14		17	17	21	23		12
C4CGA9 - 5904		Yfiler®							
4sp		14	11,14	13	29	21	11	13	13
	15	12	12	19		18	17		
							23		12
DHPAD7 - 5904		Yfiler® plus							
4sp	35,35	14	11,14	13	29	21	11	13	13
	15	12	12	19	30	18	17	10	22
	37	14		17	17	21	23		12
DU2EN8 - 5904		Yfiler®							
4sp		14	11,14	13	29	21	11	13	13
	15	12	12	19		18	17		
							23		12
GGKX2L - 5904		Yfiler®							
4sp		14	11,14	13	29	21	11	13	13
	15	12	12	19		18	17		
							23		12
HKGYMZ - 5905		Yfiler® Plus							
4sp	35	14	11,14	13	29	21	11	13	13
	15	12	12	19	30	18	17	10	22
	37	14		17	17	21	23		12
K9ZQYY - 5905		Yfiler® Plus							
4sp	35,35	14	11,14	13	29	21	11	13	13
	15	12	12	19	30	18	17	10	22
	37	14		17	17	21	23		12
RBHJQT - 5904		PowerPlex® Y 23							
4sp		14	11,14	13	29	21	11	13	13
	15	12	12	19		18	17		22
		14	12	17	17		23	10	12
WNAN48 - 5905		PowerPlex® Y 23							
4sp		14	11,14	13	29	21	11	13	13
	15	12	12	19		18	17		22
		14	12	17	17		23	10	12

Additional DNA Results

TABLE 5

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

Locus	WebCode-Test	Item 1	Item 2	Item 3	Item 3e	Item 3sp	Item 4	Item 4e	Item 4sp
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No additional DNA results were reported.

DNA Mixture Concentrations and Proportions

TABLE 6

Item 3 Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
2PKGL3 - 5905	3	Suspect Unknown Unknown		44.00 32.00 24.00
3FYBNX - 5905	3	Suspect Unknown Unknown		55.86 32.53 11.62
6BYVXE - 5905	3	Suspect Unknown Unknown	1.46 1.05 0.4383	50.00 36.00 15.00
7Q4RNQ - 5905	3	Suspect Unknown Unknown		52.69 28.12 19.19
7ZTBBC - 5904	3	Suspect Unknown Unknown	7.91 8.92 3.89	38.17 43.04 18.79
8AD99V - 5905	3	Suspect Unknown Unknown		45.00 40.00 15.00
9A8E2U - 5904	3	Suspect Unknown Unknown	1.95 1.16 0.6360	52.00 31.00 17.00
AAQAC9 - 5905	3	Suspect Unknown Unknown		40.00 33.00 27.00
BDJ4FM - 5904	3	Suspect Unknown Unknown		49.00 17.00 33.00
BVLLQR - 5905	3	Suspect Unknown Unknown		59.00 12.00 29.00
BXR27B - 5904	3	Suspect Unknown Unknown		51.00 35.00 14.00
BY24RA - 5904	4	Suspect Unknown Unknown Unknown		45.00 0.00 39.00 17.00

TABLE 6

Item 3 Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
C3G3FN - 5904	3	Suspect	0.7340	49.04
		Unknown	0.5344	35.70
		Unknown	0.2283	15.25
CHQN4K - 5905	3	Suspect		6.45
		Unknown		88.75
		Unknown		4.81
DBN2PP - 5905	3	Suspect		47.00
		Unknown		16.00
		Unknown		37.00
DHPAD7 - 5904	3	Suspect	1.51	52.00
		Unknown	1.01	35.00
		Unknown	0.3764	13.00
DKCV2M - 5904	3	Suspect		48.00
		Unknown		15.00
		Unknown		37.00
DT7ZVN - 5905	3	Suspect	0.9000	52.49
		Unknown	0.6180	36.05
		Unknown	0.1960	11.46
DYUHBK - 5904	3	Suspect		46.00
		Unknown		14.00
		Unknown		39.00
FQDN9M - 5905	3	Suspect		39.00
		Unknown		17.00
		Unknown		44.00
FXD9BH - 5904	3	Suspect		46.00
		Unknown		16.00
		Unknown		38.00
FZHVNM - 5905	3	Suspect		40.00
		Unknown		46.00
		Unknown		14.00
GGKX2L - 5904	3	Suspect	8.89	43.20
		Unknown	8.48	41.08
		Unknown	3.23	15.72
GJNQVJ - 5904	3	Suspect		52.50
		Unknown		32.61
		Unknown		14.89
GKJ9WL - 5905	3	Suspect		43.70
		Unknown		32.29
		Unknown		24.02
GX7FUL - 5905	3	Suspect		56.00
		Unknown		29.00
		Unknown		15.00

TABLE 6

Item 3 Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
HKGYZM - 5905	3	Suspect	1.42	40.00
		Unknown	1.17	33.00
		Unknown	0.9585	27.00
J3QFZD - 5905	3	Suspect		43.88
		Unknown		17.09
		Unknown		39.02
JL7N2D - 5904	3	Suspect		48.00
		Unknown		13.00
		Unknown		39.00
JPNR9J - 5905	3	Suspect	1.00	33.00
		Unknown	1.00	33.00
		Unknown	1.00	33.00
JUL73Z - 5905	3	Suspect	0.4810	50.00
		Unknown	0.3848	40.00
		Unknown	0.09620	10.00
K9ZQYY - 5905	3	Suspect	0.3880	50.00
		Unknown	0.07436	11.00
		Unknown	0.2636	39.00
L7KVQC - 5904	3	Suspect		46.00
		Unknown		23.00
		Unknown		30.00
N7X8GF - 5905	3	Suspect		41.00
		Unknown		33.00
		Unknown		26.00
QA8428 - 5904	3	Suspect		11.00
		Unknown		80.00
		Unknown		9.00
QFEREA - 5905	3	Suspect		42.00
		Unknown		38.00
		Unknown		20.00
QHGTE7 - 5904	3	Suspect		34.00
		Unknown		39.00
		Unknown		26.00
RBHJQT - 5904	3	Suspect		49.00
		Unknown		36.00
		Unknown		15.00
RJ7JZB - 5905	3	Suspect		50.00
		Unknown		12.00
		Unknown		38.00
T6PLVB - 5905	3	Suspect		41.00
		Unknown		33.00
		Unknown		26.00

TABLE 6

Item 3 Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
TN6UVB - 5905	3	Suspect Unknown Unknown		47.00 21.00 33.00
U7DE86 - 5904	3	Suspect Unknown Unknown		43.00 20.00 37.00
URYBLA - 5905	3	Suspect Unknown Unknown		50.00 16.00 34.00
UTAD89 - 5905	3	Suspect Unknown Unknown		46.00 14.00 39.00
UX3CL6 - 5904	3	Suspect Unknown Unknown		44.00 25.00 32.00
XJ9YZ6 - 5905	3	Suspect Unknown Unknown		38.90
YNL3LZ - 5904	3	Suspect Unknown Unknown		47.00 14.00 38.00
ZNHWKW - 5905	3	Suspect Unknown Unknown		44.09 38.13 17.78
ZTPKXX - 5904	3	Suspect Unknown Unknown		45.00 17.00 39.00

Response Summary: Item 3	
Estimated Number of Contributors	Percent Reported
3	48 (98%)
4	1 (2%)

TABLE 6

Item 3e Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
JYR46D - 5905	3	Suspect		57.30
		Unknown		22.83
		Unknown		19.87

Response Summary: Item 3e

<u>Estimated Number of Contributors</u>	<u>Percent Reported</u>
3	1 (100%)

TABLE 6

Item 3sp Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
JYR46D - 5905	3	Suspect		49.54
		Unknown		31.95
		Unknown		18.51

Response Summary: Item 3sp				
<u>Estimated Number of Contributors</u>		<u>Percent Reported</u>		
3		1 (100%)		

TABLE 6

Item 4 Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
8AD99V - 5905	3	Unknown		22.00
		Unknown		62.00
		Victim		16.00
FQDN9M - 5905	3	Unknown		81.00
		Unknown		15.00
		Victim		4.00
FZHVNM - 5905	3	Unknown		15.00
		Unknown		76.00
		Victim		9.00
JPNR9J - 5905	3	Unknown	0.9000	30.00
		Unknown	1.80	60.00
		Victim	0.6000	20.00
Response Summary: Item 4				
Estimated Number of Contributors		Percent Reported		
3		4 (100%)		

TABLE 6

Item 4e Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
2PKGL3 - 5905	2	Unknown Victim		1.00 99.00
3FYBNX - 5905	3	Unknown Unknown Victim		38.83 35.28 25.89
6BYVXE - 5905	3	Unknown Unknown Victim	0.1018 0.4918 0.2629	12.00 58.00 31.00
7Q4RNQ - 5905	3	Unknown Unknown Victim		42.57 27.97 29.46
7ZTBBC - 5904	3	Unknown Unknown Victim	0.1035 0.3345 0.1780	16.80 54.30 28.90
9A8E2U - 5904	3	Unknown Unknown Victim	0.03700 0.03800 0.02100	39.00 40.00 22.00
AAQAC9 - 5905	3	Unknown Unknown Victim		52.00 19.00 29.00
BDJ4FM - 5904	3	Unknown Unknown Victim		32.00 39.00 29.00
BVLLQR - 5905	3	Unknown Unknown Victim		44.00 33.00 23.00
BXR27B - 5904	3	Unknown Unknown Victim		41.00 32.00 27.00
BY24RA - 5904	4	Unknown Unknown Unknown Victim		54.00 21.00 0.00 25.00
C3G3FN - 5904	3	Unknown Unknown Victim	0.03470 0.04940 0.07340	22.04 31.37 46.58
CHQN4K - 5905	3	Unknown Unknown Victim		12.03 50.95 37.02
DBN2PP - 5905	3	Unknown Unknown Victim		11.00 31.00 57.00

TABLE 6

Item 4e Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
DHPAD7 - 5904	3	Unknown	0.02068	44.00
		Unknown	0.01786	38.00
		Victim	0.00846	18.00
DKCV2M - 5904	3	Unknown		35.00
		Unknown		48.00
		Victim		17.00
DT7ZVN - 5905	3	Unknown	0.02400	23.58
		Unknown	0.03200	31.29
		Victim	0.04600	45.13
DYUHBK - 5904	3	Unknown		25.00
		Unknown		58.00
		Victim		17.00
FXD9BH - 5904	3	Unknown		28.00
		Unknown		44.00
		Victim		29.00
GGKX2L - 5904	3	Unknown	0.3600	16.70
		Unknown	1.19	54.10
		Victim	0.6400	29.10
GKJ9WL - 5905	3	Unknown		41.69
		Unknown		19.90
		Victim		38.40
GX7FUL - 5905	3	Unknown		43.00
		Unknown		25.00
		Victim		32.00
HKGYZM - 5905	3	Unknown	0.2840	20.00
		Unknown	0.7668	54.00
		Victim	0.3692	26.00
J3QFZD - 5905	2	Unknown		1.15
		Victim		98.85
JL7N2D - 5904	3	Unknown		76.00
		Unknown		10.00
		Victim		15.00
JUL73Z - 5905	3	Unknown	0.4960	57.00
		Unknown	0.1480	17.00
		Victim	0.2350	27.00
JYR46D - 5905	3	Unknown		48.47
		Unknown		21.70
		Victim		29.83
K9ZQYY - 5905	3	Unknown	0.07520	47.00
		Unknown	0.04480	28.00
		Victim	0.04000	25.00

TABLE 6

Item 4e Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
L7KVQC - 5904	2	Unknown Victim		2.00 98.00
N7X8GF - 5905	3	Unknown Unknown Victim		49.00 34.00 17.00
QA8428 - 5904	3	Unknown Unknown Victim		34.00 38.00 28.00
QFEREA - 5905	3	Unknown Unknown Victim		44.00 23.00 33.00
QHGTE7 - 5904	3	Unknown Unknown Victim		28.00 23.00 49.00
RBHJQT - 5904	3	Unknown Unknown Victim		33.00 31.00 35.00
RJ7JZB - 5905	3	Unknown Unknown Victim		56.00 27.00 17.00
T6PLVB - 5905	3	Unknown Unknown Victim		51.00 29.00 20.00
TN6UVB - 5905	3	Unknown Unknown Victim		50.00 33.00 16.00
U7DE86 - 5904	3	Unknown Unknown Victim		31.00 37.00 32.00
URYBLA - 5905	3	Unknown Unknown Victim		28.00 18.00 55.00
UTAD89 - 5905	3	Unknown Unknown Victim		32.00 54.00 14.00
UX3CL6 - 5904	3	Unknown Unknown Victim		56.00 24.00 20.00
XJ9YZ6 - 5905	3	Unknown Unknown Victim		34.70 25.50

TABLE 6

Item 4e Results			
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)
YNL3LZ - 5904	3	Unknown	51.00
		Unknown	24.00
		Victim	25.00
ZNHWKW - 5905	3	Unknown	18.41
		Unknown	50.41
		Victim	31.18
ZTPKXX - 5904	3	Unknown	40.00
		Unknown	33.00
		Victim	27.00

Response Summary: Item 4e	
Estimated Number of Contributors	Percent Reported
3	41 (91%)
2	3 (7%)
4	1 (2%)

TABLE 6

Item 4sp Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
2PKGL3 - 5905	1	Unknown		100.00
3FYBNX - 5905	1	Unknown		100.00
6BYVXE - 5905	1	Unknown	0.9800	100.00
7Q4RNQ - 5905	1	Unknown		100.00
7ZTBBC - 5904	1	Unknown	0.7139	100.00
9A8E2U - 5904	1	Unknown	0.6140	100.00
AAQAC9 - 5905	2	Unknown Unknown		96.00 4.00
BDJ4FM - 5904	1	Unknown		100.00
BVLLQR - 5905	1	Unknown		100.00
BXR27B - 5904	1	Unknown		100.00
BY24RA - 5904	1	Unknown		100.00
C3G3FN - 5904	1	Unknown	2.76	100.00
CHQN4K - 5905	1	Unknown		100.00
DBN2PP - 5905	1	Unknown		100.00
DHPAD7 - 5904	1	Unknown	0.3970	100.00
DKCV2M - 5904	1	Unknown		100.00
DT7ZVN - 5905	1	Unknown	1.32	100.00
DYUHBK - 5904	1	Unknown		100.00
FXD9BH - 5904	1	Unknown		100.00
GGKX2L - 5904	1	Unknown	2.04	100.00
GKJ9WL - 5905	1	Unknown		100.00
GX7FUL - 5905	1	Unknown		100.00
HKGYMZ - 5905	2	Unknown Unknown	0.1724 4.14	4.00 96.00

TABLE 6

Item 4sp Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
J3QFZD - 5905	1	Unknown		100.00
JL7N2D - 5904	1	Unknown		100.00
JUL73Z - 5905	2	Unknown Unknown	0.06550 0.6485	1.00 99.00
JYR46D - 5905	3	Unknown Unknown Unknown		4.19 7.23 88.58
K9ZQYY - 5905	1	Unknown	0.1280	100.00
L7KVQC - 5904	2	Unknown Victim		81.00 19.00
N7X8GF - 5905	1	Unknown		100.00
QA8428 - 5904	1	Unknown		100.00
QFEREA - 5905	1	Unknown		100.00
QHGTE7 - 5904	1	Unknown		100.00
RBHJQT - 5904	1	Unknown		100.00
RJ7JZB - 5905	1	Unknown		100.00
T6PLVB - 5905	1	Unknown		100.00
TN6UVB - 5905	1	Unknown		100.00
U7DE86 - 5904	1	Unknown		100.00
URYBLA - 5905	1	Unknown		100.00
UTAD89 - 5905	1	Unknown		100.00
UX3CL6 - 5904	1	Unknown		100.00
XJ9YZ6 - 5905	1	Unknown		100.00
YNL3LZ - 5904	1	Unknown		100.00
ZNHWKW - 5905	1	Unknown		100.00
ZTPKXX - 5904	1	Unknown		100.00

TABLE 6

Item 4sp Results				
WebCode-Test	Number of Contributors	Contributor(s)	DNA Concentration (ng/uL)	DNA Proportion (%)
Response Summary: Item 4sp				
<u>Estimated Number of Contributors</u>		<u>Percent Reported</u>		
1		40 (89%)		
2		4 (9%)		
3		1 (2%)		

Statistical Analysis for Item 3

TABLE 7

WebCode-Test	Item 3 Methods & Results
2PKGL3 - 5905	Method(s): Likelihood Ratio Stats Analysis: The evidence DNA profile is approximately 647 billion times more likely if it originated from Male Suspect (K2) plus two unknown individuals than if it originated from three unknown individuals. This analysis provides very strong support for the proposition that Male Suspect (K2) is a contributor to the DNA obtained from this sub-item. Female Victim (K1) is excluded based on the LR of zero. Database(s) Used: 2015 Expanded FBI STR Population Data
3FYBNX - 5905	Method(s): Likelihood Ratio Stats Analysis: Assuming three contributors, the evidence profile is 300 septillion times more likely to be observed if the male suspect (item 2) and two unknowns are the contributors than if three unknowns are the contributors. Assuming three contributors, the female victim (item 1) is excluded as a contributor. Database(s) Used: NIST 1036 Databases - Forensic Sci. Int.: Genetics 31 (2017) e36–e40
3ZKZ6H - 5905	Method(s): Likelihood Ratio Stats Analysis: The Suspect (item 2-1) cannot be excluded as a contributor to Mixture 1 (see Testing Summary) from a bloodstain (item 3-1) on the Victim's shirt. The STR DNA results are estimated to be 610 billion times more likely if they originate from the Suspect and two unknown people than if they originate from three unknown people unrelated to the Suspect. Database(s) Used: i. NIST Asian, ii. NIST African American, iii. NIST Caucasian, iv. Srivastava et al. (2019) South Asian, v. [Location Identifying Database]
4VL4UG - 5904	Method(s): Likelihood Ratio Stats Analysis: 3e. The results are consistent with the DNA profile from item #003e being a mixture of three contributors with at least two of them being male. The female victim is eliminated as a contributor to the DNA profile from item 003e. Assuming three contributors, the DNA profile from item #003e is at least 1 trillion times more likely to occur if it originated from the male suspect and two unknown individuals than if it originated from three unknown individuals. 3sp. The results are consistent with the DNA profile from item #003sp being a mixture of two male contributors. The female victim is eliminated as a contributor to the DNA profile from item #003sp. Assuming two contributors, the DNA profile from item #003sp is at least 1.4 billion times more likely to occur if it originated from male suspect and one unknown individual than if it originated from two unknown individuals. Database(s) Used: FBI Extended AfAmBahJam, FBI Extended Cauc, FBI Extended SE Hisp
6BYVXE - 5905	Method(s): Likelihood Ratio Stats Analysis: Item 1 - Excluded. Item 2 - LR = 100 billion. Database(s) Used: [Location Identifying Database]
7Q4RNQ - 5905	Method(s): Likelihood Ratio Stats Analysis: H1: The evidence originated from Male Suspect and two unknown unrelated individuals. H2: The evidence originated from three unknown unrelated individuals. The DNA profile obtained from Questioned stain from victim's shirt is approximately 2.3 Septillion times more likely if it originated from Male Suspect and two unknown unrelated individuals than if it originated from three unknown unrelated individuals. There is evidentiary support for the inclusion of Male Suspect as a possible contributor to the DNA profile obtained as compared with the alternate explanation of the evidence. Database(s) Used: NIST revised: African American, Asian, Caucasian, Hispanic

TABLE 7

WebCode- Test	Item 3 Methods & Results
7ZTBBC - 5904	Method(s): Likelihood Ratio Stats Analysis: LR = Male suspect + 2 unknowns vs 3 unknowns > 100 billion. The DNA recovered is a mixture that originates from at least three individuals. Male suspect (item 2) cannot be excluded as a contributor to this mixture. Assuming there are three contributors, it is greater than 100 billion times more likely to obtain this mixed profile if it originates from Male suspect (item 2) and two unknown, unrelated individuals, rather than if it originates from three unknown, unrelated individuals in the National population. The profile of the two unknown male contributors (individual 'A' and individual 'B') have been determined. Database(s) Used: National Population
8AD99V - 5905	Method(s): Likelihood Ratio Stats Analysis: A DNA profile consistent with a mixture of 3 individuals, at least two of whom are male, with contributors in roughly 45:40:15 proportion was obtained for Item 3. The statistical analysis does not support the proposition that Item 1 is a contributor to the mixture DNA profile. A DNA profile consistent with a mixture of 3 individuals, at least 2 of whom are male, with contributors in roughly 45:40:15 proportion was obtained for Item 3. Item 2 is included as a possible contributor to the mixture DNA profile obtained from Item 3. The mixed DNA profile is 5.72908E20 times more likely if it originated from Item 2 and 2 unknown individuals than if it had originated from 3 unknown individuals. Therefore, it is expected that one person in 5.72908E20 random individuals would provide an equal or greater likelihood ratio based on the scenario above. Database(s) Used: NIST 1036 Caucasian
96BRBQ - 5904	Method(s): Likelihood Ratio Stats Analysis: The profile obtained from the blood sample recovered from the shirt, was assessed to be a mixture of DNA from four people. All of the elements found in the profile attributed to the suspect were present and he could not be excluded as being a possible contributor to this mixed profile. I have considered the following propositions: 1. The DNA in the mixture came from the suspect and three unknown people. 2. The DNA in the mixture came from four unknown people unrelated to the suspect. A calculation made with reference to [Population] survey data shows that this finding is at least one billion (1,000,000,000) times more likely to arise under the first proposition. The injured party was excluded as a possible contributor to this mixed profile. Database(s) Used: [Location Identifying Database]
9A8E2U - 5904	Method(s): Likelihood Ratio Stats Analysis: Calculation for the match between the DNA profile of the suspect and the DNA sampled from item 3: Hypothesis 1: the sample contains DNA of the suspect and two unknown, unrelated individuals. Hypothesis 2: the sample contains DNA of three unknown, unrelated individuals. LR = 1.069E19. Database(s) Used: Population data used as published in A.A. Westen et al. Forensic Science International: Genetics 10 (2014) 55–63.
AAQAC9 - 5905	Method(s): Likelihood Ratio Stats Analysis: Victim is excluded as a contributor. The DNA evidence is 16 billion times more likely if Suspect is a contributor. Database(s) Used: [Location Identifying Database]
AUXKFC - 5905	Method(s): Likelihood Ratio Stats Analysis: 3e: Assuming three contributors, the DNA profile from item #3e is at least 1 trillion times more likely to occur if it originated from the male suspect and two unknown individuals than if it originated from three unknown individuals. 3sp: Assuming three contributors, the DNA profile from item #3sp is at least 1 trillion times more likely to occur if it originated from the male suspect and two unknown individuals than if it originated from three unknown individuals. Database(s) Used: FBI Extended AfAmBahJam, FBI Extended Cauc, FBI Extended SE Hisp

TABLE 7

WebCode- Test	Item 3 Methods & Results
BDJ4FM - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 40.7 quintillion times more likely if they originated from the male suspect and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that the male suspect is a contributor to the DNA from this item. Based on the likelihood ratio result, the female victim is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
BVLLQR - 5905	Method(s): Likelihood Ratio Stats Analysis: Female Victim (K1) is excluded based on the LR of zero. The evidence DNA profile is approximately 1 quadrillion times more likely if it originated from Male Suspect (K2) and two unknown individuals than if it originated from three unknown individuals. This analysis provides very strong support for the proposition that Male Suspect (K2) is a contributor to this DNA obtained from the sub-item. Database(s) Used: 2015 FBI Expanded Population Database
BXR27B - 5904	Method(s): Likelihood Ratio Stats Analysis: The source of item 001 - (Known blood from Victim) is excluded as a possible contributor to the DNA results developed from item 003. The mixture of DNA is approximately 740 sextillion ($7.4E+23$) times more likely if it originated from item 002 - (Known blood from Suspect) and 2 unknown, unrelated contributors than if it originated from 3 unknown, unrelated contributors. Statistical calculations are based on 21 of 21 STR loci. Database(s) Used: The National Institute of Standards and Technology (NIST) [Population] database, as published in Forensic Science International: Genetics, Volume 7, Issue 3, e82 - e83 and NIST 1036 Revised [Population] Dataset (July 2017), http://strbase.nist.gov/NISTpop.htm
BY24RA - 5904	Method(s): Likelihood Ratio Stats Analysis: GlobalFiler DNA analysis of item 003-A resulted in a mixture. The DNA mixture was interpreted as originating from 4 contributors (including at least one male contributor), with a mixture proportion of 45%:39%:17%:0%. Further comparisons can be made to the mixture upon the submission of suitable reference standard(s). The mixture of DNA is approximately 10 times more likely if it originated from 4 unknown, unrelated contributors than if it originated from item 001 - (Blood - Victim) and 3 unknown, unrelated contributors. Statistical calculations are based on 21 of 21 STR loci. This statistical result provides limited support for the proposition that item 001 - (Blood - Victim) is not a contributor to the DNA results obtained from item 003-A. The mixture of DNA is approximately 76 quintillion ($7.6E+19$) times more likely if it originated from item 002 - (Blood - Suspect) and 3 unknown, unrelated contributors than if it originated from 4 unknown, unrelated contributors. Statistical calculations are based on 21 of 21 STR loci. The statistical result provides very strong support for the proposition that item 002 - (Blood - Suspect) is a contributor to the DNA results obtained from item 003-A. Results from the 45% and 39% and 17% contributors will be entered into the Combined DNA Index System (CODIS). Based upon the quantitation results of male DNA, item 003-A may be suitable for Y-STR analysis. Database(s) Used: African American, Caucasian and Hispanic populations in the National Institute of Standards and Technology (NIST) [Population] database

TABLE 7

WebCode- Test	Item 3 Methods & Results
C3CKHP - 5905	Method(s): Likelihood Ratio Stats Analysis: Autosomal Hp: Item 2 + 2 unkn. Hd: 3 unkn. Log10LR (CaseSolver) = 1,7E+01; Log10LR (LRMixStudio) = 1,3E+01; Log10LR (LabRetriever) = 1,1E+01 (african); 1,2E+01 (caucasian); 1,1E+01 (hispanic); Log10LR (DNAMView) = 2,8E+01; Log10LR (EFM) = 2,8E+01. Given the "Evidence Item 3" Genetic Profile, the proposition that Male (Item 2) contributed to the DNA is at least 10^{11} times more probable than the proposition that the DNA originated from an unknown, unrelated individual. Hp: Item 1 + 2 unkn. Hd: 3 unkn. Log10LR (CaseSolver) = -1,7E+01. Y-STR Hp: Item 2 + 2 unkn. Hd: 3 unkn. Log10LR (YHRD) = 3,5E+00. Database(s) Used: Nist all Pop for autosomal Worldwide for YHRD
C3G3FN - 5904	Method(s): Likelihood Ratio Stats Analysis: [Participant did not return statistical analysis.] Database(s) Used: [Location Identifying Database]
C4CGA9 - 5904	Method(s): Likelihood Ratio Stats Analysis: The LR value calculated was 1.12×10^{27} to 1, which means it is about 1.12×10^{27} times more likely that the observed DNA profile being a mixture originating from the suspect and two unknown individuals than if it originating from three unrelated individuals selected at random from the local [Population]. In verbal terms, this LR value has provided very strong support for the proposition that the suspect and two unknown individuals were the contributors to the DNA mixture. Database(s) Used: [Location Identifying Database]
CHQN4K - 5905	Method(s): [Participant did not report a method.] Stats Analysis: H1: The evidence originated from Suspect and two unknown, unrelated individuals. H2: The evidence originated from three unknown, unrelated individuals. The DNA profile obtained from the stain on the victim's shirt is approximately 80 quadrillion times more likely if it originated from Suspect and two unknown, unrelated individuals than if it originated from three unknown, unrelated individuals. Database(s) Used: NIST revised: African American, Asian, Caucasian, Hispanic
DBN2PP - 5905	Method(s): Likelihood Ratio Stats Analysis: Female Victim (K1) is excluded based on the LR of zero. The evidence DNA profile is approximately 825 trillion times more likely if it originated from Male Suspect (K2) and two unknown individuals than if it originated from three unknown individuals. This provides very strong support for inclusion of Male Suspect (K2). Database(s) Used: 2015 FBI Expanded Population Database
DHPAD7 - 5904	Method(s): Likelihood Ratio Stats Analysis: The profile was interpreted as coming from 3 individuals. The DNA profile is at least 100 billion times more likely to have occurred if it originated from the suspect and two unknown individuals than if it originated from three unknown individuals selected at random from the population. The victim can be excluded from donating to the profile. Database(s) Used: Local population database.
DKCV2M - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 87.2 sextillion times more likely if they originated from Male Suspect and two unknown, unrelated individual than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that Male Suspect is a contributor to the DNA from this item. Female Victim is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036

TABLE 7

WebCode- Test	Item 3 Methods & Results
DT7ZVN - 5905	Method(s): Likelihood Ratio Stats Analysis: [Participant did not return statistical analysis.] Database(s) Used: [Location Identifying Database]
DU2EN8 - 5904	Method(s): Likelihood Ratio Stats Analysis: The LR value calculated for the possible involvement of the male suspect was 8.13E21 to 1, which means it is about 8.13E21 times more likely that the observed DNA profile being a mixture originating from the male suspect and two unknown individuals than if it originating from three unrelated individuals selected at random from the [Population]. Database(s) Used: [Location Identifying Database]
DYUHBK - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 711 quadrillion times more likely if they originated from the male suspect and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that the male suspect is a contributor to the DNA from this item. Based on the likelihood ratio result, the female victim is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 JULY 2017
FQDN9M - 5905	Method(s): Likelihood Ratio Stats Analysis: A DNA profile consistent with a mixture of 3 individuals, at least 2 of whom are male, with contributors in roughly 44:39:17 proportion was obtained for Item 3. The statistical analysis does not support the proposition that Item 1 is a contributor to the mixture DNA profile. A DNA profile consistent with a mixture of 3 individuals, at least 2 of whom are male, with contributors in roughly 44:39:17 proportion was obtained for Item 3. Item 2 is included as a possible contributor to the mixture DNA profile obtained from Item 3. The mixed DNA profile is 4.88170E20 times more likely if it originated from Item 2 and 2 unknown individuals than if it had originated from 3 unknown individuals. Therefore, it is expected that one person in 4.88170E20 random individuals would provide an equal or greater likelihood ratio based on the scenario above. Database(s) Used: NIST 1036 Caucasian
FXD9BH - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. Based on the likelihood ratio result, the female victim is excluded as a possible contributor to the DNA from this item. The DNA results are approximately 4.93 sextillion times more likely if they originated from the male suspect and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that the male suspect is a contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
FZHVNM - 5905	Method(s): Likelihood Ratio Stats Analysis: The mixed DNA profile is 1.02357E21 times more likely if it originated from Item 2 (Suspect) and 2 unknown individuals than if it had originated from 3 unknown individuals. The statistical analysis does not support the proposition that Item 1 (Victim) is a contributor to the mixture DNA profile. Database(s) Used: NIST1036 Caucasian

TABLE 7

WebCode-Test	Item 3 Methods & Results
G24YWK - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA result was interpreted as a mixture of three individuals and determined to be suitable for comparison. The mixture is at least 1.8 sextillion (10^{21}) times more likely if it originated from Suspect and two unknown, unrelated individuals than if it originated from three unknown, unrelated individuals. This analysis provides very strong support for the proposition that Suspect is a contributor to the mixture. Victim is excluded as a contributor to the mixture. Database(s) Used: NIST Caucasian, NIST African American, NIST Hispanic, NIST Asian
GGKX2L - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile obtained from item 3 is a mixture of at least three individuals. Following set of hypotheses were evaluated: A) Hp; Item 1 plus two unknown, Hd; three unknowns, LR (MLE) = 3.27×10^{-9}. B) Hp; Item 2 plus two unknown, Hd; three unknown, LR (MLE) = 9.79×10^{-11}. Database(s) Used: NIST Caucasian database 2017 with Theta Co-ancestry coefficient = 0.03
GJNQVJ - 5904	Method(s): Likelihood Ratio Stats Analysis: The findings are in the order of a billion (1000 times) more likely if the DNA has originated from the suspect (item 2) and two unknown individuals rather than the DNA has originated from three unknown individuals. (Where the unknown individuals are unrelated to each other and the suspect.) Database(s) Used: [Location Identifying Database]
GKJ9WL - 5905	Method(s): Likelihood Ratio Stats Analysis: The DNA typing profile obtained from exhibit ITEM 3 (portion of shirt, area AA) is of mixed origin consistent with having originated from three individuals, at least one of whom is male. Comparison to the known sample, exhibit ITEM 2 (Suspect), provides very strong support for inclusion to these results. The DNA evidence is 8.5 trillion times more likely to be observed if it originated from Suspect and two unknown, unrelated individuals rather than if it originated from three unknown, unrelated individuals selected at random. Comparison to the profile designated as Individual 1 provides support for inclusion to these results. The donor of the known sample, exhibit ITEM 1 (Complainant), and the profile designated as Male 1 are excluded from these results. These results are suitable for comparison. (Refer to Remark 1). Database(s) Used: Stratified LR calculated from the following databases: [Location Identifying Databases]
GX7FUL - 5905	Method(s): Likelihood Ratio Stats Analysis: Female Victim (K1) is excluded based on an LR of zero. The evidence DNA profile is approximately 855 trillion times more likely if it originated from Male Suspect (K2) and two unknown individuals than if it originated from three unknown individuals. This analysis provides very strong support for the proposition that Male Suspect (K2) is a contributor to the DNA obtained from this sub-item. Database(s) Used: 2015 FBI Expanded Population Database
HKGYZM - 5905	Method(s): Likelihood Ratio Stats Analysis: Results - PP21: Victim is excluded as a contributor. The DNA evidence is 1.1 billion times more likely if Suspect is a contributor. Results - Yfiler Plus Y-MXT(3) - Due to the complexity of this mixed Y-chromosome DNA profile, it was deemed suitable for exclusionary purposes only and any non-exclusion cannot be supported statistically and will not be provided. Statistically supported conclusions cannot be made regarding the possible contribution of DNA by Suspect. As such, an opinion on the potential exclusion or non-exclusion of Suspect cannot be provided. Database(s) Used: [Location Identifying Database]

TABLE 7

WebCode- Test	Item 3 Methods & Results
J3QFZD - 5905	Method(s): Likelihood Ratio Stats Analysis: H1: The evidence originated from the male suspect and two unknown, unrelated individuals. H2: The evidence originated from three unknown, unrelated individuals. The DNA profile obtained from the cutting from the stain from the female victim's shirt is approximately 9.4 quintillion times more likely if it originated from the male suspect and two unknown, unrelated individuals than if it originated from three unknown, unrelated individuals. There is evidentiary support for the inclusion of the male suspect as a possible contributor to the DNA profile obtained as compared with the alternate explanation of the evidence. Database(s) Used: NIST revised: African American, Asian, Caucasian, Hispanic
JL7N2D - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. Based on the likelihood ratio result, "female victim" is excluded as a possible contributor to the DNA from this item. The DNA results are approximately 124 septillion times more likely if they originated from "male suspect" and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that "male suspect" is a contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
JPNR9J - 5905	Method(s): Likelihood Ratio Stats Analysis: H1: $S + U_n + U_n / H_0: U_n + U_n + U_n = 4,4 \times 10^{12}$ drop out=0,19. Database(s) Used: STRider
JUL73Z - 5905	Method(s): Likelihood Ratio Stats Analysis: Victim excluded. Suspect not excluded. The DNA evidence is 100 billion times more likely if the donor of item 2 is a contributor to the DNA. Database(s) Used: [Location Identifying Database]
JYR46D - 5905	Method(s): Likelihood Ratio Stats Analysis: H1: The evidence originated from the suspect and two unknown, unrelated individuals. H2: The evidence originated from three unknown, unrelated individuals. The DNA profile obtained from the non-sperm cell fraction of the questioned stain from the victim's shirt is approximately 870 sextillion times more likely if it originated from the suspect and two unknown, unrelated individuals than if it originated from three unknown, unrelated individuals. There is evidentiary support for the inclusion of the suspect as a possible contributor to the DNA profile obtained as compared with the alternate explanation of the evidence. H1: The evidence originated from the suspect and two unknown, unrelated individuals. H2: The evidence originated from three unknown, unrelated individuals. The DNA profile obtained from the sperm cell fraction of the questioned stain from the victim's shirt is approximately 6.2 million times more likely if it originated from the suspect and two unknown, unrelated individuals than if it originated from three unknown, unrelated individuals. There is evidentiary support for the inclusion of the suspect as a possible contributor to the DNA profile obtained as compared with the alternate explanation of the evidence. Database(s) Used: NIST revised: African American, Asian, Caucasian, Hispanic
K9ZQYY - 5905	Method(s): Likelihood Ratio Stats Analysis: PP21 Results- Item 1- Excluded. Item 2- LR of 100 billion. The DNA evidence is 100 billion times more likely if the suspect and two unknown (and unrelated) people from the [Population] are contributors than if, three unknown (and unrelated) people from the [Population] are contributors. YFP Results- Item 2- Not excluded. This result is for intelligence purposes only. A statistical assessment of this result cannot be performed. Database(s) Used: [Location Identifying Database]

TABLE 7

WebCode-Test	Item 3 Methods & Results
L7KVQC - 5904	Method(s): Likelihood Ratio Stats Analysis: Item 3.1 (Portion of "Questioned stain from victim's shirt"): The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 107 sextillion times more likely if they originated from the male suspect and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that the male suspect is a contributor to the DNA from this item. The female victim is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
N7X8GF - 5905	Method(s): Likelihood Ratio Stats Analysis: 2A-2SPT: Female Victim (K1) is excluded as a contributor to this DNA evidence profile based on the LR of 0. The evidence DNA profile is approximately 7 trillion times more likely if it originated from the Male Suspect (K2) and 2 unknown individuals than if it originated from 3 unknown individuals. This analysis provides very strong support for the proposition that Male Suspect (K2) is a contributor to the DNA mixture obtained from this sub-item. Database(s) Used: 2015 Expanded FBI Database
QA8428 - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 489 quadrillion times more likely if they originated from the male suspect and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that the male suspect is a contributor to the DNA from this item. Based on the likelihood ratio result, the female victim is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
QFEREA - 5905	Method(s): Likelihood Ratio Stats Analysis: Assuming three contributors, the evidence profile is 720 sextillion times more likely to be observed if the Male Suspect and two unknowns are contributors than if three unknowns are the contributors. Assuming three contributors, the Female Victim is excluded as being a contributor. Database(s) Used: NIST Databases - Forensic Sci. Int.: Genetics 31 (2017) e36–e40
QHGTET - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 29.0 trillion times more likely if they originated from the Male Suspect and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that the Male Suspect is a contributor to the DNA from this item. Based on the likelihood ratio result, the Female Victim is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
RBHJQT - 5904	Method(s): Likelihood Ratio Stats Analysis: A. Proposition: Explanation 1: The DNA profile obtained originated from the male suspect (item 2) and two unknown, unrelated individuals. Explanation 2: The DNA profile obtained originated from three unknown, unrelated individuals. The DNA profile obtained is approximately 1E25 times more likely (very strong support) if it originated from the male suspect and two unknown, unrelated individuals than if the DNA profile obtained originated from three unknown, unrelated individuals. Database(s) Used: NIST1036 (revised 2017) - Caucasian, African American, Hispanic

TABLE 7

WebCode- Test	Item 3 Methods & Results
RJ7JZB - 5905	Method(s): Likelihood Ratio Stats Analysis: The evidence DNA profile is approximately 120 Trillion times more likely if it originated from 3 unknown individuals than if it originated from Female Victim (K1) and 2 unknown individuals. This analysis provides a very strong support for exclusion of Female Victim (K1). The evidence DNA profile is approximately 138 Trillion times more likely if it originated from Male Suspect (K2) and two unknown individuals than if it originated from 3 unknown individuals. This analysis provides a very strong support for inclusion of Male Suspect (K2). Database(s) Used: 2015 FBI Expanded Population Database
T6PLVB - 5905	Method(s): Likelihood Ratio Stats Analysis: The Female Victim (K1) is excluded based on the LR of zero. The evidence DNA profile is approximately 46 trillion times more likely if it originated from Male Suspect (K2) and two unknown individuals than if it originated from three unknown individuals. This analysis provides very strong support for the proposition that Male Suspect (K2) is included as a contributor to the DNA obtained from this sub-item. Database(s) Used: 2015 FBI Expanded Population Database
TN6UVB - 5905	Method(s): Likelihood Ratio Stats Analysis: The DNA profile is approximately 34 trillion times more likely if it originated from the male suspect and two unknown individuals than if it originated from three unknown individuals. The female victim is excluded as a contributor to this DNA mixture. Database(s) Used: FBI population database
U7DE86 - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 687 quintillion times more likely if they originated from male suspect and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that male suspect is a contributor to the DNA from this item. Female victim is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
URYBLA - 5905	Method(s): Likelihood Ratio Stats Analysis: Female Victim (K1) is excluded based on the LR of zero. The evidence DNA profile is approximately 114 trillion times more likely if it originated from Male Suspect (K2) and two unknown individuals than if it originated from three unknown individuals. This analysis provides very strong support for the proposition that Male Suspect (K2) is a contributor to the DNA obtained from this sub-item. Database(s) Used: 2015 FBI Expanded Population Database
UTAD89 - 5905	Method(s): Likelihood Ratio Stats Analysis: 3A-2PT: The evidence DNA profile is approximately 100 Trillion times more likely if it originated from Male Suspect (K2) and 2 unknown individuals than if it originated from 3 unknown individuals. This provides very strong support for inclusion. Female Victim (K1) is excluded based on the LR of zero. Database(s) Used: 2015 FBI Expanded Population Database

TABLE 7

WebCode- Test	Item 3 Methods & Results
UX3CL6 - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 39.5 sextillion times more likely if they originated from the MALE SUSPECT and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that the MALE SUSPECT is a contributor to the DNA from this item. The FEMALE VICTIM is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
WFEJA7 - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA result was interpreted as a mixture of three individuals and determined to be suitable for comparison. The mixture is at least 120 quintillion (10^{18}) times more likely if it originated from the suspect and two unknown, unrelated individuals than if it originated from three unknown, unrelated individuals. This analysis provides very strong support for the proposition that the suspect is a contributor to the mixture. The victim is excluded as a contributor to the mixture. Database(s) Used: NIST
XJ9YZ6 - 5905	Method(s): Likelihood Ratio Stats Analysis: Item 2 (Suspect): $4.159e+17$. Database(s) Used: [Location Identifying Database]
YNL3LZ - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 48.2 sextillion times more likely if they originated from the male suspect and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that the male suspect is a contributor to the DNA from this item. The female victim is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
ZNHWKW - 5905	Method(s): Likelihood Ratio Stats Analysis: H1: The evidence originated from the known male suspect and two unknown, unrelated individuals. H2: The evidence originated from three unknown, unrelated individuals. The DNA profile obtained from the stain from the victim's shirt is approximately 18 quintillion times more likely if it originated from the male suspect and two unknown, unrelated individuals than if it originated from three unknown, unrelated individuals. There is evidentiary support for the inclusion of the male suspect as a possible contributor to the DNA profile obtained as compared with the alternate explanation of the evidence. Database(s) Used: NIST revised: African American, Asian, Caucasian, Hispanic
ZTPKXX - 5904	Method(s): Likelihood Ratio Stats Analysis: Item 3.1 (Portion of "Questioned stain from victim's shirt"): The DNA profile from this item was interpreted as a mixture of three individuals with at least two male contributors. The DNA results are approximately 282 quintillion times more likely if they originated from The Suspect and two unknown, unrelated individuals than if they originated from three unknown, unrelated individuals. Based on the likelihood ratio, this provides very strong support that The Suspect is a contributor to the DNA from this item. The Victim is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017

Statistical Analysis for Item 4

TABLE 8

WebCode- Test	Item 4 Methods & Results
2PKGL3 - 5905	Method(s): Likelihood Ratio Stats Analysis: For 4e: Assuming Female Victim (K1), the evidence DNA profile is approximately 2 billion times more likely if it originated from the assumed contributor and one unknown individual than if it originated from the assumed contributor and Male Suspect (K2). This analysis provides very strong support for the proposition that Male Suspect (K2) is excluded as a contributor to the DNA obtained from this sub-item. For 4sp: Female Victim (K1) is excluded based on the LR of zero. Male Suspect (K2) is excluded based on the LR of zero. Database(s) Used: 2015 Expanded FBI STR Population Data
3FYBNX - 5905	Method(s): Likelihood Ratio, binary Stats Analysis: Sperm fraction: Assuming one contributor, the female victim (item 1) and the male suspect (item 2) are both excluded as contributors. Non-sperm fraction: Assuming three contributors, the evidence profile is 82 quintillion times more likely to be observed if the female victim (item 1), the male from the sperm fraction of this item, and one unknown are the contributors than if the male from the sperm fraction of this item and two unknowns are the contributors. Assuming three contributors (including the male from the sperm fraction of this item), the male suspect (item 2) is excluded as a contributor. Database(s) Used: NIST 1036 Databases - Forensic Sci. Int.: Genetics 31 (2017) e36–e40
4VL4UG - 5904	Method(s): Likelihood Ratio Stats Analysis: 4e. The results are consistent with the DNA profile from item #004e being a mixture of three contributors with at least one of them being male. The female victim is assumed to be a contributor to the DNA profile from item #004e. The results do not support the hypothesis that male suspect is a contributor to this profile. Assuming three contributors, where female victim is one of the contributors, male suspect is eliminated as a contributor to the DNA profile from item #004e. 4sp. The results are consistent with the DNA profile from item #004sp originating from a single male individual. The female victim and the male suspect are eliminated as the source of the DNA profile from item #004sp. Database(s) Used: FBI Extended AfAmBahJam, FBI Extended Cauc, FBI Extended SE Hisp
6BYVXE - 5905	Method(s): Likelihood Ratio, Manual Stats Analysis: 4sp (manual comparison): Item 1 - Excluded. Item 2 - Excluded. 4e (STRmix): Item 1 - Assumed contributor. Item 2 - Excluded. Database(s) Used: [Location Identifying Database]
7Q4RNQ - 5905	Method(s): Likelihood Ratio Stats Analysis: [Participant did not return statistical analysis.] Database(s) Used: NIST revised: African American, Asian, Caucasian, Hispanic

TABLE 8

WebCode- Test	Item 4 Methods & Results
8AD99V - 5905	Method(s): Likelihood Ratio Stats Analysis: A DNA profile consistent with a mixture of 3 individuals, at least one of whom is male, with contributors in roughly 62:22:16 proportion was obtained for Item 4. The statistical analysis does not support the proposition that Item 2 is a contributor to the mixture DNA profile. A DNA profile consistent with a mixture of 3 individuals, at least 1 of whom is male, with contributors in roughly 62:22:16 proportion was obtained for Item 4. Item 1 is included as a possible contributor to the mixture DNA profile obtained from Item 4. The mixed DNA profile is 1.72077E13 times more likely if it originated from Item 1 and 2 unknown individuals than if it had originated from 3 unknown individuals. Therefore, it is expected that one person in 1.72077E13 random individuals would provide an equal or greater likelihood ratio based on the scenario above. Database(s) Used: NIST 1036 Caucasian
96BRBQ - 5904	Method(s): [Participant did not report a method.] Stats Analysis: No statistical analysis carried out for item 4. The full profile of an unknown male was obtained from the sperm fraction. A mixed profile was obtained from the cellular/epithelial fraction. The suspect was excluded as being a possible contributor to this mixed profile, therefore, statistical analysis not performed. The injured party and unknown male could not be excluded as possible contributors to the cellular/epithelial fraction. Database(s) Used: [Participant did not return database used.]
9A8E2U - 5904	Method(s): Likelihood Ratio Stats Analysis: Calculation for the match between the DNA profile of the victim and the DNA sampled from item 4 (fraction other cells (i.e. '4e')): Hypothesis 1: the sample contains DNA of the victim and two unknown, unrelated individuals. Hypothesis 2: the sample contains DNA of three unknown, unrelated individuals. LR = 2.76E16. Furthermore, the unknown contributor of 'item 4sp' can be identified as 'unknown person 1' and this person is also a contributor of DNA of 'item 4e'. Calculation for the match between the DNA profile of unknown person 1 and the DNA sampled from item 4 (fraction other cells (i.e. '4e')): Hypothesis 1: the sample contains DNA of unknown person 1 and two unknown, unrelated individuals. Hypothesis 2: the sample contains DNA of three unknown, unrelated individuals. LR = 5.87E11. Database(s) Used: Population data used as published in A.A. Westen et al. Forensic Science International: Genetics 10 (2014) 55–63.
AAQAC9 - 5905	Method(s): Likelihood Ratio Stats Analysis: Epithelial Fraction: The DNA evidence is 83 million times more likely if Victim is a contributor. The DNA evidence is more likely if Suspect is not a contributor. Sperm Fraction: The DNA evidence is more likely if Victim is not a contributor. The DNA evidence is more likely if Suspect is not a contributor. Database(s) Used: [Location Identifying Database]
BDJ4FM - 5904	Method(s): Likelihood Ratio Stats Analysis: Item 4.1 (Portion of "Questioned stain from victim's underwear")-F2: The DNA profile from this item was interpreted as a mixture of three individuals, with at least one male contributor and with the female victim as an assumed contributor. Based on the likelihood ratio result, the male suspect is excluded as a possible contributor to the DNA from this item. Item 4.1 (Portion of "Questioned stain from victim's underwear")-F1: The male DNA profile from this item was interpreted as a single-source profile. The female victim and the male suspect are excluded as possible contributors to the DNA from this item. Database(s) Used: NIST 1036 July 2017

TABLE 8

WebCode- Test	Item 4 Methods & Results
BVLLQR - 5905	Method(s): Likelihood Ratio Stats Analysis: For 4e: Female Victim (K1) is excluded based on the LR of zero. For 4sp: Male Suspect (K2) is excluded based on the LR of zero. Database(s) Used: 2015 FBI Expanded Population Database
BXR27B - 5904	Method(s): Likelihood Ratio Stats Analysis: 4e: Assuming item 001 - (Known blood from Victim) is a contributor to the mixture, foreign results were obtained. Further comparisons can be made to the mixture upon the submission of a suitable reference standard(s). The source of item 002 - (Known blood from Suspect) is excluded as a possible contributor to the DNA results developed from the non-sperm cell fraction of item 004. 4sp: The source of item 001 - (Known blood from Victim) is excluded as a possible contributor to the DNA profile developed from the sperm cell fraction of item 004. The source of item 002 - (Known blood from Suspect) is excluded as a possible contributor to the DNA profile developed from the sperm cell fraction of item 004. Database(s) Used: The National Institute of Standards and Technology (NIST) [Population] database, as published in Forensic Science International: Genetics, Volume 7, Issue 3, e82 - e83 and NIST 1036 Revised [Population] Dataset (July 2017), http://strbase.nist.gov/NISTpop.htm
BY24RA - 5904	Method(s): Likelihood Ratio Stats Analysis: GlobalFiler DNA analysis from the sperm cell fraction of item 004-A resulted in a male profile. Comparisons can be made to the profile upon the submission of suitable reference standard(s). The source of item 001 - (Blood - Victim) is excluded as a possible contributor to the DNA profile developed from the sperm cell fraction of item 004-A. The source of item 002 - (Blood - Suspect) is excluded as a possible contributor to the DNA profile developed from the sperm cell fraction of item 004-A. The DNA profile will be entered into the Combined DNA Index System (CODIS). Based upon the quantitation results of male DNA, the sperm cell fraction of item 004-A may be suitable for Y-STR analysis. GlobalFiler DNA analysis of the non-sperm cell fraction of item 004-A resulted in a mixture. The DNA mixture was interpreted as originating from 4 contributors (including at least one male contributor), with a mixture proportion of 25%:54%:21%:0%. Assuming item 001 - (Blood - Victim) is a contributor to the mixture, foreign results were obtained. Further comparisons can be made to the mixture upon the submission of a suitable reference standard(s). The mixture of DNA is approximately 1.6 times more likely if it originated from item 001 - (Blood - Victim) and 3 unknown, unrelated contributors than if it originated from item 001 - (Blood - Victim) and item 002 - (Blood - Suspect) and 2 unknown, unrelated contributors. Statistical calculations are based on 21 of 21 STR loci. The likelihood ratio is uninformative regarding the contribution of item 002 - (Blood - Suspect) to the DNA results obtained from the non-sperm cell fraction of item 004-A due to equal support for the inclusion and exclusion of the individual. Results from the 54% and 21% contributors will be entered into the Combined DNA Index System (CODIS). Based upon the quantitation results of male DNA, the non-sperm cell fraction of item 004-A may be suitable for Y-STR analysis. Database(s) Used: African American, Caucasian and Hispanic populations in the National Institute of Standards and Technology (NIST) [Population] database
C3CKHP - 5905	Method(s): Likelihood Ratio Stats Analysis: Hp: Item 1 + 2 unkn. Hd: 3 unkn. Log10LR (CaseSolver) = 1,2E+01; Log10LR (LRMixStudio) = 1,0E+01; Log10LR (LabRetriever) = 6,7E+00(african); 8,1E+00 (caucasian); 8,6E+00 (hispanic); Log10LR (DNAView) = 1,4E+01; Log10LR (EFM) = 1,3E+01. Given the "Evidence Item 4" Genetic Profile, the proposition that Female (Item 1) contributed to the DNA is at least 10^7 times more probable than the proposition that the DNA originated from an unknown, unrelated individual. Hp: Item 2 + 2 unkn. Hd: 3 unkn. Log10LR (CaseSolver) = -1,3E+01. Database(s) Used: Nist all Pop for autosomal Worldwide for YHRD

TABLE 8

WebCode- Test	Item 4 Methods & Results
C3G3FN - 5904	Method(s): Likelihood Ratio Stats Analysis: [Participant did not return statistical analysis.] Database(s) Used: [Location Identifying Database]
C4CGA9 - 5904	Method(s): Likelihood Ratio Stats Analysis: The LR value calculated was 6.58×10^{22} to 1, which means it is about 6.58×10^{22} times more likely that the observed DNA profile being a mixture originating from the victim and two unknown individuals than if it originating from three unrelated individuals selected at random from the local [Population]. In verbal terms, this LR value has provided very strong support for the proposition that the victim and two unknown individuals were the contributors to the DNA mixture. Database(s) Used: [Location Identifying Database]
DBN2PP - 5905	Method(s): Likelihood Ratio Stats Analysis: Non-sperm fraction: Female Suspect (K1) is an assumed contributor. Male Suspect (K2) is excluded based on the LR of zero. Sperm fraction: Female Victim (K1) is excluded based on the LR of zero. Male Suspect (K2) is excluded based on the LR of zero. Database(s) Used: 2015 FBI Expanded Population Database
DHPAD7 - 5904	Method(s): Likelihood Ratio Stats Analysis: 04E - The profile was interpreted as coming from 3 individuals. The victim was assumed as a contributor to the profile. The suspect can be excluded from donating to the profile. 04SP - The profile was interpreted as coming from 1 unknown male individual. No LR was calculated. Database(s) Used: Local population database.
DKCV2M - 5904	Method(s): [Participant did not report a method.] Stats Analysis: Fraction 1 (SF) - The male DNA profile from this item was interpreted as a single-source profile. Female Victim and Male Suspect are excluded as possible contributors to the DNA from this item. Fraction 2 (EF) - The DNA profiles from this item was interpreted as a mixture of three individuals, with at least one male contributor and with Female Victim as an assumed contributor. Male Suspect is excluded as a possible contributor to the DNA from this item. Database(s) Used: [Participant did not return database used.]
DT7ZVN - 5905	Method(s): Likelihood Ratio Stats Analysis: [Participant did not return statistical analysis.] Database(s) Used: [Location Identifying Database]
DU2EN8 - 5904	Method(s): Likelihood Ratio Stats Analysis: The LR value calculated for the possible involvement of the female victim was 2.11×10^{21} to 1, which means it is about 2.11×10^{21} times more likely that the observed DNA profile being a mixture originating from the female victim and two unknown individuals than if it originating from three unrelated individuals selected at random from the [Population]. Database(s) Used: [Location Identifying Database]

TABLE 8

WebCode- Test	Item 4 Methods & Results
DYUHBK - 5904	Method(s): Likelihood Ratio Stats Analysis: Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 1)-SF: The male DNA profile from this item was interpreted as a single-source profile. The female victim and the male suspect are excluded as possible contributors to the DNA from this item. Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 2)-EF: The DNA profile from this item was interpreted as a mixture of three individuals with at least one male contributor and with the female victim as an assumed contributor. Based on the likelihood ratio result, the male suspect is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 JULY 2017
FQDN9M - 5905	Method(s): Likelihood Ratio Stats Analysis: A DNA profile consistent with a mixture of 3 individuals, at least 1 of whom is male, with contributors in roughly 81:15:4 proportion was obtained for Item 4. Item 1 is included as a possible contributor to the mixture DNA profile obtained from Item 4. The mixed DNA profile is 2.21209E12 times more likely if it originated from Item 1 and 2 unknown individuals than if it had originated from 3 unknown individuals. Therefore, it is expected that one person in 2.21209E12 random individuals would provide an equal or greater likelihood ratio based on the scenario above. A DNA profile consistent with a mixture of 3 individuals, at least 1 of whom is male, with contributors in roughly 81:15:4 proportion was obtained for Item 4. The statistical analysis does not support the proposition that Item 2 is a contributor to the mixture DNA profile. Database(s) Used: NIST 1036 Caucasian
FXD9BH - 5904	Method(s): [Participant did not report a method.] Stats Analysis: Item 4.1 (Portion of "Questioned stain from victim's underwear" – Fraction 1): The male DNA profile from this item was interpreted as a single-source profile. The female victim and male suspect are excluded as possible contributors to the DNA from this item. Item 4.1 (Portion of "Questioned stain from victim's underwear" – Fraction 2): The DNA profile from this item was interpreted as a mixture of three individuals, with at least one male contributor and with the female victim as an assumed contributor. The male suspect is excluded as a possible contributor to the DNA from this item. Database(s) Used: [Participant did not return database used.]
FZHVNM - 5905	Method(s): Likelihood Ratio Stats Analysis: The mixed DNA profile is 3.64819E14 times more likely if it originated from Item 1 (Victim) and 2 unknown individuals than if it had originated from 3 unknown individuals. The statistical analysis does not support the proposition that Item 2 (Suspect) is a contributor to the mixture DNA profile. Database(s) Used: NIST1036 Caucasian
G24YWK - 5904	Method(s): [Participant did not report a method.] Stats Analysis: E1 fraction: The DNA result was interpreted as a mixture of three individuals, with Victim as an assumed contributor. The remaining portion of the mixture was determined to be suitable for comparison but ineligible for CODIS. Suspect is excluded as a contributor to the mixture. E2 fraction: A single-source male DNA profile was obtained and determined to be suitable for comparison but ineligible for CODIS. Victim and Suspect are excluded as the contributors of the profile. Database(s) Used: [Participant did not return database used.]

TABLE 8

WebCode- Test	Item 4 Methods & Results
GGKX2L - 5904	Method(s): Likelihood Ratio Stats Analysis: The DNA profile obtained from epithelial fraction of item 4 is a mixture of at least three individuals. Following set of hypotheses were evaluated: A) Hp; Item 1 plus two unknown, Hd; three unknowns, LR (MLE) = 8×10^6. B) Hp; Item 1 plus item 2 plus unknown, Hd; item 1 plus two unknown, LR (MLE) = 3.7×10^{-12}. Database(s) Used: NIST Caucasian database 2017 with Theta Co-ancestry coefficient = 0.03
GKJ9WL - 5905	Method(s): Likelihood Ratio Stats Analysis: The DNA typing results obtained from exhibit ITEM 4 (portion of underwear, area AA) are of mixed origin consistent with having originated from three individuals, at least one of whom is male. The donor of the known sample, exhibit ITEM 1 (Complainant), is assumed to be a contributor to these results. The profile of an unknown male individual was obtained and has been personally designated as Male 1. The profile of a second unknown individual was obtained and has been personally designated as Individual 1. The donor of the known sample, exhibit ITEM 2 (Suspect), is excluded from these results. These results are suitable for comparison. (Refer to Remark 1). Database(s) Used: Stratified LR calculated from the following databases: [Location Identifying Databases]
GX7FUL - 5905	Method(s): Likelihood Ratio Stats Analysis: Assuming Female Victim (K1), Male Suspect (K2) is excluded from the DNA results obtained for sub-item 4A-1PT (fraction 1), based on an LR of zero. Female Victim (K1) and Male Suspect (K2) are excluded from the DNA results obtained for sub-item 4A-1PT (fraction 2) based on LR of zero. Database(s) Used: 2015 FBI Expanded Population Database
HKGYZM - 5905	Method(s): Likelihood Ratio Stats Analysis: Sperm Fraction Results - PP21: A male contributor was identified within this mixed DNA profile and has been designated as Unknown Male 1. The DNA evidence is more likely if Victim is not a contributor. The DNA evidence is more likely if Suspect is not a contributor. Sperm Fraction Results - Yfiler Plus: A Y-chromosome DNA profile consistent with having originated from at least one male individual was recovered and has been designated as Unknown Y-chromosome Profile 1. Epi Fraction Results - PP21: Victim is an assumed contributor to this mixed DNA profile. Suspect is excluded as a contributor. Epi Fraction Results - Yfiler Plus Y-MXT(2). This mixed Y-chromosome DNA profile could be separated into major and minor components. A partial Y-chromosome major component DNA profile consistent with having originated from at least one male individual was recovered and has been designated as Unknown Y-chromosome Profile 2. Suspect is excluded as a contributor. Database(s) Used: [Location Identifying Database]
JL7N2D - 5904	Method(s): Likelihood Ratio Stats Analysis: Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 1): The male DNA profile from this item was interpreted as a single-source profile. "Female victim" and "male suspect" are excluded as possible contributor(s) to the DNA from this item. Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 2): The DNA profile from this item was interpreted as a mixture of three individuals, with at least one male contributor and with "female victim" as an assumed contributor. Based on the likelihood ratio result, "male suspect" is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017

TABLE 8

WebCode- Test	Item 4 Methods & Results
JPNR9J - 5905	Method(s): Likelihood Ratio Stats Analysis: H1: V+Un+Un/H0:Un+Un+Un= 2,74x 10 ⁸ drop out=0,16. Database(s) Used: STRider
JUL73Z - 5905	Method(s): Likelihood Ratio Stats Analysis: Item 4 Sperm fraction: Victim (Item 1) and Suspect (Item 2): Excluded as the major contributor. Minor component too partial for comparison. Item 4 Epithelial fraction: Victim (Item 1) is an assumed contributor. Suspect (Item 2) is excluded as a contributor. Database(s) Used: [Location Identifying Database]
K9ZQYY - 5905	Method(s): Likelihood Ratio Stats Analysis: PP21 Results- Sperm fraction- Item 1- Excluded, Item 2- Excluded. Non sperm fraction- Item 1- assumed contributor, Item 2- Excluded. YFP Results- Sperm fraction- Item 2- Excluded. Non sperm fraction- Item 2- Excluded. Database(s) Used: [Location Identifying Database]
L7KVQC - 5904	Method(s): Likelihood Ratio Stats Analysis: Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 1): The DNA profile from this item was interpreted as a mixture of two individuals, with at least one male contributor and with the female victim as an assumed contributor. The male suspect is excluded as a possible contributor to the DNA from this item. Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 2): The DNA profile from this item was interpreted as a mixture of two individuals, with at least one male contributor and with the female victim as an assumed contributor. The male suspect is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
N7X8GF - 5905	Method(s): Likelihood Ratio Stats Analysis: 1A-3PT_NS: Assuming Female Victim (K1), Male Suspect (K2) is excluded as a contributor to this DNA evidence profile based on the LR of 0. 1A-3PT_SP: Female Victim (K1) is excluded as a contributor to this DNA evidence profile based on the LR of 0. Male Suspect (K2) is excluded as a contributor to this DNA evidence profile based on the LR of 0. Database(s) Used: 2015 Expanded FBI Database
QA8428 - 5904	Method(s): [Participant did not report a method.] Stats Analysis: 4.1 EF/F2: The DNA profile from this item was interpreted as a mixture of three individuals, with at least one male contributor, and with the female victim as an assumed contributor. The male suspect is excluded as a possible contributor to the DNA from this item. 4.1 SF/F1: The male DNA profile from this item was interpreted as a single-source profile. The female victim and male suspect are excluded as possible contributors to the DNA from this item. Database(s) Used: [Participant did not return database used.]
QFEREA - 5905	Method(s): Likelihood Ratio Stats Analysis: Assuming three contributors to the non-sperm fraction, the evidence profile is 18 sextillion times more likely to be observed if the Female Victim and two unknowns are contributors than if three unknowns are contributors. Assuming the Female Victim and two unknowns to the non-sperm fraction (three contributors total), the Male Suspect is excluded as being a contributor. Assuming one contributor to the sperm fraction, the Female Victim and the Male Suspect are each excluded as being a contributor. Database(s) Used: NIST Databases - Forensic Sci. Int.: Genetics 31 (2017) e36–e40

TABLE 8

WebCode- Test	Item 4 Methods & Results
QHGTE7 - 5904	Method(s): Likelihood Ratio Stats Analysis: 4.1-F1: The male DNA profile from this item was interpreted as a single-source profile. The Female Victim and Male Suspect are excluded as possible contributors to the DNA from this item. 4.1-F2: The DNA profile from this item was interpreted as a mixture of three individuals, with at least one male contributor and with the Female Victim as an assumed contributor. Based on the likelihood ratio result, the Male Suspect is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
RBHJQT - 5904	Method(s): [Participant did not report a method.] Stats Analysis: No LR reported as item belongs to victim. Reporting statement is as follows: 1. The female victim (item 1) is assumed to be present in the DNA profile obtained. A statistical calculation may be provided upon request. Database(s) Used: [Participant did not return database used.]
RJ7JZB - 5905	Method(s): Likelihood Ratio Stats Analysis: For 4e: Assuming Female Victim (K1), Male Suspect (K2) is excluded based on an LR of 0. For 4SP: Female Victim (K1) and Male Suspect (K2) are excluded based on an LR of 0. Database(s) Used: 2015 FBI Expanded Population Database
T6PLVB - 5905	Method(s): Likelihood Ratio Stats Analysis: 4e: Assuming the Female Victim (K1), the Male Suspect (K2) is excluded based on the LR of zero. 4sp: The Female Victim (K1) is excluded based on the LR of zero. The Male Suspect (K2) is excluded based on the LR of zero. Database(s) Used: 2015 FBI Expanded Population Database
TN6UVB - 5905	Method(s): Likelihood Ratio Stats Analysis: 4E: Assuming the female victim, the male suspect is excluded as a contributor to this DNA mixture. 4S: The female victim and male suspect are excluded as contributors to this DNA profile. Database(s) Used: FBI population database
U7DE86 - 5904	Method(s): Likelihood Ratio Stats Analysis: F1 - The male DNA profile from this item was interpreted as a single-source profile. Female victim and male suspect are excluded as possible contributors to the DNA from this item. F2 - The DNA profile from this item was interpreted as a mixture of three individuals, with at least one male contributor and with female victim as an assumed contributor. Based on the likelihood ratio result, male suspect is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
URYBLA - 5905	Method(s): Likelihood Ratio Stats Analysis: For 4e: Assuming Female Victim (K1), the evidence DNA profile is approximately 88 quadrillion times more likely if it originated from Female Victim (K1) and two unknown individuals than if it originated from Female Victim (K1), Male Suspect (K2) and an unknown individual. This analysis provides very strong support for the proposition that Male Suspect (K2) is excluded as a contributor to the DNA obtained from this sub-item. For 4sp: Female Victim (K1) is excluded based on the LR of zero. Male Suspect (K2) is excluded based on the LR of zero. Database(s) Used: 2015 FBI Expanded Population Database

TABLE 8

WebCode- Test	Item 4 Methods & Results
UTAD89 - 5905	Method(s): Likelihood Ratio Stats Analysis: 4A-1PT_NS: Assuming Female Victim (K1), Male Suspect (K2) is excluded based on the LR of zero. 4A-1PT_SP: Female Victim (K1) is excluded based on the LR of zero. Male Suspect (K2) is excluded based on the LR of zero. Database(s) Used: 2015 FBI Expanded Population Database
UX3CL6 - 5904	Method(s): Likelihood Ratio Stats Analysis: Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 1): The male DNA profile from this item was interpreted as a single-source profile. The FEMALE VICTIM and the MALE SUSPECT are excluded as possible contributors to the DNA from this item. Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 2): The DNA profile from this item was interpreted as a mixture of three individuals, with at least two male contributors and with the FEMALE VICTIM as an assumed contributor. The MALE SUSPECT is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017
WFEJA7 - 5904	Method(s): Likelihood Ratio Stats Analysis: E1 fraction: The DNA result was interpreted as a mixture of three individuals, with the victim as an assumed contributor. The remaining portion of the mixture was determined to be suitable for comparison. The suspect is excluded as a contributor to the mixture. E2 fraction: A single-source male DNA profile was obtained and determined to be suitable for comparison. The victim and the suspect are excluded as the contributors of the profile. Database(s) Used: NIST
XJ9YZ6 - 5905	Method(s): Likelihood Ratio Stats Analysis: Ep: Item 1 (Victim): 3.142e+20. Unknown male from item 4 sp: 1.170e+11. Sp: Unknown male from item 4 sp: 5.767e+26. Database(s) Used: [Location Identifying Database]
YNL3LZ - 5904	Method(s): [Participant did not report a method.] Stats Analysis: Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 1): The male DNA profile from this item was interpreted as a single-source profile. The female victim and male suspect are excluded as possible contributors to the DNA from this item. Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 2): The DNA profile from this item was interpreted as a mixture of three individuals, with at least one male contributor and with the female victim as an assumed contributor. The male suspect is excluded as a possible contributor to the DNA from this item. Database(s) Used: [Participant did not return database used.]
ZTPKXX - 5904	Method(s): [Participant did not report a method.] Stats Analysis: Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 1): The male DNA profile from this item was interpreted as single source. The Suspect and The Victim are excluded as possible contributors to the DNA from this item. Item 4.1 (Portion of "Questioned stain from victim's underwear" - Fraction 2): The DNA profile from this item was interpreted as a mixture of three individuals, with at least one male contributor and with The Victim as an assumed contributor. The Suspect is excluded as a possible contributor to the DNA from this item. Database(s) Used: NIST 1036 July 2017

Additional Comments

TABLE 9

WebCode-Test	Additional Comments
3FYBNX - 5905	For items 3 and 4, the results include all detected alleles along with the associated stutter peaks. This reflects the data that is imported into STRmix in order to perform probabilistic genotyping.
4VL4UG - 5904	NR = No Result. NT = Not Tested. Per laboratory policy, the number of contributors is assessed/determined during analysis. Upon comparison to known samples, first a visual comparison is conducted. A manual elimination without the use of probabilistic genotyping software can be done. The assuming of individuals to items of evidence where their presence is expected and non-probative is also permitted. In assessing number of contributors, the following was determined: Item 3e: 3 contributors with at least 2 being male. Item 3sp: 2 male contributors. Item 4e: 3 contributors with at least 1 being male. Item 4sp: single male contributor. Female victim (item 1) was manually eliminated by the analyst as a contributor to the DNA profiles from item 3e and item 3sp. Female victim was assumed to be a contributor to the DNA profile from item 4e. Female victim was manually eliminated by the analyst as the source of the DNA profile from item 4sp. Male suspect (item 2) was included as a contributor to the DNA profiles from item 3e and item 3sp. The likelihood ratios calculated by STRmix are included in the statistical analysis section. Male suspect was eliminated through STRmix as a contributor to the DNA profile from item 4e. Male suspect was manually eliminated by the analyst as the source of the DNA profile from item 4sp. The lab has a ceiling value of 1 trillion for reporting likelihood ratios.
8AD99V - 5905	The laboratory does not report DNA concentrations for mixture proportions. Items 1 and 2 were also processed through the laboratory's mtDNA whole genome workflow and generated full mtDNA genomes for each sample.
9A8E2U - 5904	Following our laboratory policy, for the calculations, all called alleles are taken into account. This includes the alleles mentioned in brackets, even though these alleles can be artefacts.
AUXKFC - 5905	NR = No Results. NT = Not Tested. Per laboratory policy, number of contributors is assessed/determined during analysis. Upon comparison to known samples, first a visual comparison is conducted. A manual elimination without the use of probabilistic genotyping software can be done. The assuming of individuals to items of evidence where their presence is expected and non-probative is also permitted. In assessing number of contributors, the following was determined: Item 3e: 3 contributors with at least 2 being male. Item 3sp: 3 contributors with at least 1 being male. Item 4e: 3 contributors with at least 1 being male. Item 4sp: single male contributor. Female victim (item 1) was eliminated by the analyst as a contributor to the DNA profiles from Item 3e and item 3sp. Female victim was assumed to be a contributor to the DNA profile from item 4e. Female victim was manually eliminated by the analyst as the source of the DNA profile from item 4sp. Male suspect (item 2) was included as a contributor to the DNA profiles from items 3e and 3sp. The likelihood ratios calculated by STRmix are included in the statistical analysis section. Male suspect was eliminated by the analyst as a contributor to the DNA profile from item 4e. Male suspect was manually eliminated as the source of the DNA profile from item 4sp. The laboratory has a ceiling value of 1 trillion for reporting likelihood ratios.
BY24RA - 5904	Item 1 was excluded from the sperm cell fraction of item 4. Item 2 was excluded from the sperm cell fraction of item 4. Item 1 was included in the non-sperm cell fraction of item 4. The LR of item 2 compared to the non-sperm cell fraction of item 4 favored exclusion: however, the LR will be reported as "uninformative" based on the verbal scale in [Laboratory's] policy.
DKCV2M - 5904	** = May be attributed to elevated stutter.
FQDN9M - 5905	The laboratory does not report DNA concentrations for mixture proportions. Items 1 and 2 were also processed through the laboratory's mtDNA whole genome workflow and generated full mtDNA genomes for each sample.

TABLE 9

WebCode-Test	Additional Comments
FXD9BH - 5904	** May be attributed to elevated stutter.
FZHVNM - 5905	Lab does not calculate/report DNA concentration of contributors from STRmix.
GGKX2L - 5904	DNA Mixture concentration and proportions; DNA mixture proportions are reported as computed by probabilistic genotyping software (EuroForMix). DNA concentration (ng/μL) for each contributor is reported as concentration of item obtained from real time PCR analysis multiplied by mixture proportion of that contributor divided by 100.
GJNQVJ - 5904	[From Table 1d, Serology Screening Results, Human Origin Test(s) Performed, Item 3 and 4: "dna profiled"]. [From Table 1e, Serology Screening Results, Y-Screening Test(s) Performed, Item 3: "PPY23 profiled" and Item 4: "not dna profiled"].
GKJ9WL - 5905	In profile entry pages, alleles that were consistent with stutter were marked with an asterisk.
JUL73Z - 5905	Mixture Sample Analysis: Item 4 Sperm fraction: Contributor 2: Too partial for comparison. DNA profile from Item 4 Epithelial fraction, At site D2S1338 24 allele is a potential high stutter. (17.7% of 25).
L7KVQC - 5904	**= May be attributed to elevated stutter.
QFEREA - 5905	For items 3 and 4, the results include all detected alleles along with the associated stutter peaks. This reflects the data that is imported into STRmix in order to perform probabilistic genotyping.
QHGTE7 - 5904	** = May be attributed to possible stutter.
RBHJQT - 5904	1. DNA concentrations for contributor positions are not reported. 2. NID = No interpretable data. 3. Inclusions and exclusions were conducted by the analyst outside of the STRmix software program. STRmix was used, however, to calculate a likelihood ratio for item 3 for the following propositions: 2sUU_UUU. 4. Per statistical protocol, item 4 belonged to the victim; Thus, no statistical analysis was conducted. STRmix was run for deconvolution purposes with the following proposition: 1sUU_1sUU.
U7DE86 - 5904	**=possible elevated stutter.
UX3CL6 - 5904	**Possible elevated stutter.
WNAN48 - 5905	Blood was found in the Item 3. Semen and saliva was not found in the Item 3. The Item 3 contained a mixture of DNA from three persons (three males). The DNA profile of the Item 3 has been compared with the profiles of the victim and the suspect. The Item 3 contained DNA alleles from the suspect and two unknown men. The results of the comparison were assessed given the proposition (a) that the DNA originates from the suspect and two unknown men to proposition (b) that the DNA originates from three unknown persons. The DNA results are in the order of 15 440 300 000 000 times more probable ($LR = 1.54 \times 10^{13}$) if the first proposition (a) is true than if the alternative (b) is true. Results provide extremely strong support for the proposition (a) rather than proposition (b). Blood and semen were found in the Item 4. Saliva was not found in the Item 4. The Item 4 contained a mixture of DNA from three persons (one female and two males). The DNA profile of the Item 4 has been compared with the profiles of the victim and the suspect. The Item 4 contained DNA alleles originating from the victim and two unknown men. The full DNA profile was obtained from sperm fraction one of unknown man. The DNA profile of the epithelial and sperm fraction does not match with the suspect's DNA profile.

TABLE 9

WebCode- Test	Additional Comments
YNL3LZ - 5904	** = possible elevated stutter.
ZTPKXX - 5904	**=possible elevated stutter.

-End of Report-
(Appendix may follow)

Test No. 25-5904: Probabilistic Genotyping

DATA MUST BE SUBMITTED BY **Oct. 14, 2025, 11:59 p.m. EDT** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: QV9D2P

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

Scenario:

Police are investigating a sexual assault involving a female victim and male suspect. The victim reported to police that she attended a party at the suspect's house. She then awoke in the suspect's bed with several injuries, wearing only her shirt. The suspect has been apprehended by police. Police are submitting a stain from the shirt the victim was wearing at the time of the assault (Item 3) and a stain from the underwear the victim put on after she awoke (Item 4). Also provided are known standards from the female victim (Item 1) and male suspect (Item 2).

Items Submitted (Sample Pack G4 - Cloth Swatches):

Item 1: Known blood from the female victim

Item 2: Known blood from the male suspect

Item 3: Questioned stain from victim's shirt (tan)

Item 4: Questioned stain from victim's underwear (blue)

Part I: SCREENING TESTS

Note: Laboratories submitting their results for ASCLD/LAB or NATA accreditation **MUST** identify any screening tests performed and report the test results.

Indicate the results of any screening tests performed on the questioned stains (Items 3 & 4).

Please use the abbreviations listed in this response key to fill in the Screening Test tables on this tab. This is not an all inclusive list of tests, and should not be used to determine what tests should be performed.

TESTS NOT ON THIS LIST MAY BE USED FOR SCREENING.

Test	Abbreviation	Test	Abbreviation
Acid Phosphatase	AP	Alternate Light Source	ALS
Kastle Meyer	KM	Leucomalachite Green	LMG
Microscopic	Micro	Ortho-tolidine	O-tol
Phenolphthalein-Tetramethyl benzidine	PTMB	Prostate Specific Antigen	PSA
Rapid Stain Identification	RSID	Tetramethyl benzidine	TMB

Example:	<u>Positive</u>	<u>Negative</u>	<u>Inconclusive</u>	<u>Not Tested</u>	<u>Test(s) Performed</u>
Blood	☒	☐	☐	☐	KM, O-tol, PTMB
Semen	☐	☒	☐	☐	PSA
Saliva	☐	☐	☐	☒	
Human Origin	☐	☐	☐	☒	
Y-Screening (male DNA)	☐	☐	☐	☒	
Other Specified Body Fluid	☐	☐	☐	☐	

Please indicate the Test(s) Performed on the corresponding line for each type of screening.

Screening data not reported. ☐

Item 3:	<u>Positive</u>	<u>Negative</u>	<u>Inconclusive</u>	<u>Not Tested</u>	<u>Test(s) Performed</u>
Blood	☐	☐	☐	☐	
Semen	☐	☐	☐	☐	
Saliva	☐	☐	☐	☐	
Human Origin	☐	☐	☐	☐	
Y-Screening (male DNA)	☐	☐	☐	☐	
Other:	☐	☐	☐	☐	

Item 4:	<u>Positive</u>	<u>Negative</u>	<u>Inconclusive</u>	<u>Not Tested</u>	<u>Test(s) Performed</u>
Blood	☐	☐	☐	☐	
Semen	☐	☐	☐	☐	
Saliva	☐	☐	☐	☐	
Human Origin	☐	☐	☐	☐	
Y-Screening (male DNA)	☐	☐	☐	☐	
Other:	☐	☐	☐	☐	

Part II: DNA INTERPRETATION

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

<u>Victim (Item 1)</u>			<u>Suspect (Item 2)</u>		
	Item 3	Item 4		Item 3	Item 4
Yes	☐	☐	Yes	☐	☐
No	☐	☐	No	☐	☐
Inconclusive	☐	☐	Inconclusive	☐	☐
No Interpretation	☐	☐	No Interpretation	☐	☐

Part III: DNA Results for Known Item 1

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

STR Amplification Kit(s) Used:

Please check all the brands that apply for this item and record only additional kit specific information in the blank provided (i.e. 16, Plus, Direct, HS, Fusion, etc.).

☐ Identifiler®		☐ GlobalFiler™		☐ Investigator® 24plex	
☐ PowerPlex®		Other			

Report the Probabilistic Genotyping Software Used:

☐ STRmix		☐ TrueAllele		Other	
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Alleles below are sorted in Default order.

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

Part III (continued): DNA Analysis - Additional DNA

- Use this section to report results for loci not currently listed in other sections of the data sheet.
- Report alleles in numerical order, separated by a comma.
- If your laboratory policy is to indicate minor or weaker alleles, please enclose them within brackets [].
- Click "Add Row" to show another row of boxes for entry.

Did you perform a differential extraction of Item 3? Yes ☐ No ☐

Did you perform a differential extraction of Item 4? Yes ☐ No ☐

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

Part IV: Mixture Sample Analysis

NOTE: To allow functionality of this page please select an answer to differential extraction questions on previous tabs for Item 3 and Item 4.

For each item, select the Estimated Number of Contributors and Contributor Identification (Victim, Suspect, or Unknown Individual). Calculate the DNA Concentration and DNA Proportion for each contributor using your laboratory’s protocols. For Unknown Individual(s), report the contributor determined to have the highest concentration of DNA first and remaining in descending order. Enter "DNA Concentration" in ng/uL and "DNA Proportion" in percentage.

Concentration and proportion data not reported. ☐

Item 3:

Estimated number of contributors:

		DNA Concentration (ng/uL)	DNA Proportion (%)
Contributor 1			

Item 4:

Estimated number of contributors:

		DNA Concentration (ng/uL)	DNA Proportion (%)
Contributor 1			

Part V: DNA Statistical Analysis

Item 3:

1) 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:

☐ Likelihood Ratio (LR)

Other

Note: Please use appropriate punctuation to indicate the end of sentences, sections, and statements in the free-form space below. Extra spacing and returns used for separation within your text will not transfer and may cause your information to be illegible in the Summary Report. The use of lists and tabular formats to deliver information is also cautioned against, as these do not transfer.

2) Please list any databases used in the statistical analysis of Item 3 below.

Item 4:

1) 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:

☐ Likelihood Ratio (LR)

Other

Note: Please use appropriate punctuation to indicate the end of sentences, sections, and statements in the free-form space below. Extra spacing and returns used for separation within your text will not transfer and may cause your information to be illegible in the Summary Report. The use of lists and tabular formats to deliver information is also cautioned against, as these do not transfer.

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

Part VI: ADDITIONAL COMMENTS

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

Note: Please use appropriate punctuation to indicate the end of sentences, sections, and statements in the free-form space below. Extra spacing and returns used for separation within your text will not transfer and may cause your information to be illegible in the Summary Report. The use of lists and tabular formats to deliver information is also cautioned against, as these do not transfer.

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 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 ANAB and/or A2LA. (Accreditation Release section below must be completed.)
- ☐ This participant's data is **not** intended for submission to ANAB and/or A2LA.

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

Step 1: Provide the applicable Accreditation Certificate Number(s) for your laboratory.

ANAB Certificate No.

A2LA Certificate No.

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

Authorized Contact Person and Title

Laboratory Name

Location (City/State)