Collaborative Testing Services, Inc.
FORENSIC TESTING PROGRAM

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Manufacturer's Information
Test No. 17-5804: DNA-Semen

Each sample pack consisted of two known bloodstains on clean, white muslin fabric (Items 1 & 2), and two questioned stains; one on clean, pink material (Item 3) and one on clean, blue/white patterned material (Item 4). Participants were requested to analyze these items using their existing protocols.

SAMPLE PREPARATION: The stains in Items 1, 2, and 4 were prepared from human whole blood which was either drawn into citric acid preservative blood bags or EDTA tubes. The stain in Item 3 was a mixture prepared from human whole blood and semen. The semen sample was received frozen from an outside supplier. The semen sample was first thawed and mixed 1:1 with TAE buffer, then mixed 1:1 with the blood. Item 1 (50 µl) was prepared using blood collected from a female donor. Items 2 (50 µl) and 4 (50 µl) were both created using blood collected from the same male donor. Item 3 (50 µl) was a mixture of blood from the Item 1 female donor and semen collected from the donor represented in Items 2 and 4. Stains from different sources were prepared at separate times and were packaged once they were thoroughly dried. Completed sample sets were stored at -20°C until shipment on July 05, 2017 following receipt of predistribution results.

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

VERIFICATION: All predistribution laboratories confirmed the manufacturers expected associations. Consistent allelic results were reported for all STR and YSTR loci with the exception of one pre-distribution laboratory that reported an additional allele call at D10S1248 that fell in stutter position and was found to be just above the analytical threshold. No changes were deemed necessary prior to distribution.

Amelogenin and STR Results

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

Item	D1S1656	D2S1338	D2S441	D3S1358	D4S2408	D5S818
	D6S1043	D7S820	D8S1179	D9S1122	D10S1248	D12S391
	D13S317	D16S539	D17S1301	D18S51	D19S433	D20S482
	D21S11	D22S1045	Amelogenin	CSF1PO	FGA	Penta D
	Penta E	SE33	TH01	TPOX	vWA	
1	14,16.3	23,24	10,11	16,17	*	11,13
	16,18	8,10	15,15	*	13,16	15,19
	11,12	9,13	*	16,19	13,15	*
	30,32.2	11,15	X,X	11,13	20,24	10,12
	12,16	27.2,28.2	6,9	8,9	15,17	
2	16.3,17	17,23	11.3,14	15,17	*	11,13
	11,12	10,13	13,15	*	11,13	18.3,20
	10,11	10,14	*	13,17	13,14	*
	32,32.2	11,16	X,Y	11,13	22,23	8,10
	12,12	16,34.2	6,8	8,8	16,16	
3-Blood	14,16.3	23,24	10,11	16,17	*	11,13
	16,18	8,10	15,15	*	13,16	15,19
	11,12	9,13	*	16,19	13,15	*
	30,32.2	11,15	X,X	11,13	20,24	10,12
	12,16	27.2,28.2	6,9	8,9	15,17	
3-Semen	16.3,17	17,23	11.3,14	15,17	*	11,13
	11,12	10,13	13,15	*	11,13	18.3,20
	10,11	10,14	*	13,17	13,14	*
	32,32.2	11,16	X,Y	11,13	22,23	8,10
	12,12	16,34.2	6,8	8,8	16,16	
4	16.3,17	17,23	11.3,14	15,17	*	11,13
	11,12	10,13	13,15	*	11,13	18.3,20
	10,11	10,14	*	13,17	13,14	*
	32,32.2	11,16	X,Y	11,13	22,23	8,10
	12,12	16,34.2	6,8	8,8	16,16	

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	DYS505	DYS518	
	DYS522	DYS533	DYS549	DYS570	DYS576	DYS612	DYS627	DYS635	DYS643	YGATAH4	Y Indel
2	35,38	14	11,15	12	30	24	11	13	13	15	
	12	13	19	29	15	18	10	22	*	37	
	*	11	12	19	19	*	19	23	10	12	2
3-Semen	35,38	14	11,15	12	30	24	11	13	13	15	
	12	13	19	29	15	18	10	22	*	37	
	*	11	12	19	19	*	19	23	10	12	2
4	35,38	14	11,15	12	30	24	11	13	13	15	
	12	13	19	29	15	18	10	22	*	37	
	*	11	12	19	19	*	19	23	10	12	2

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

The information presented here is that received from the sample manufacturer. It presents details of the design specification for the test samples and/or details of how they were prepared. This information does not necessarily represent the answers that should or could be obtained from an examination of the sample. Final interpretation of the results should be deferred until the summary report is available.