Collaborative Testing Services, Inc.
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FORENSIC TESTING PROGRAM

# Manufacturer's Information <br> Test No. 23-5802: DNA-Semen 

Each sample set consisted of two known bloodstains on FTA $^{\text {TM }}$ Micro Cards (ltems 1 \& 2), and two questioned stains on colored fabric (ltems 3 \& 4). Participants were requested to analyze these items using their existing protocols.

SAMPLE PREPARATION: The stains on Items 1, 2, and 4 were prepared from human whole blood which was either drawn into citric acid preservative bags or EDTA tubes. The stain on Item 3 was a mixture prepared from human whole blood and semen. Item 1 (75 $\mu \mathrm{L}$ ) was created using blood collected from a male donor. Item $2(75 \mu \mathrm{~L})$ was created using blood collected from another male donor. Item $3(50 \mu \mathrm{~L})$ was created using a 1:1 mixture of blood from the male donor used in Item 1 and semen from the male donor used in Item 2. Item $4(50 \mu \mathrm{~L})$ was created using blood from the male donor used in Item 1. Stains from different sources were prepared at separate times and were packaged once they were thoroughly dried. Completed sample sets were stored at $-20^{\circ} \mathrm{C}$ until shipment on March 07, 2023 following completion of the verification stage.

SAMPLE SET ASSEMBLY: For each sample set, all Items (1-4) were packaged into separate envelopes and then placed together in a pre-labeled sample set envelope and sealed. The sealed sample set 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 manufacturer's expected associations. Consistent allelic results were reported for all STR and YSTR loci. the sample. Final interpretation of the results should be deferred until the summary report is available.

## Manufacturer's Information, continued Test No. 23-5802: DNA-Semen

Amelogenin and STR Results

| Item | Results compiled from predistribution laboratories and a consensus of at least 10 participants. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 12,14 | 17,17 | 12,13 | 14,17 | 9,11 | * |
|  | 8,9 | 12,14 | 11,14 | 19,19 | 11,12 | 10,11 |
|  | 15,17 | 12,13 | 31,35 | 14,17 | X, Y | 10,10 |
|  | 22,27 | 6,12 | 7,8 | 18,19 | 7,7 | 9,11 |
|  | 16,18 | 10 | 16 | 17 | 2 |  |
| 2 | 11,12 | 19,22 | 14,14 | 15,15 | 9,10 | * |
|  | 9,10 | 14,14 | 13,14 | 18,21 | 11,13 | 12,12 |
|  | 14,17 | 13,14 | 30,30 | 14,16 | X, Y | 10,11 |
|  | 25,25 | 9,9 | 12,13 | 19,28.2 | 9,9.3 | 8,11 |
|  | 15,17 | 12 | 17 | 18 | 2 |  |
| 3-Blood | 12,14 | 17,17 | 12,13 | 14,17 | 9,11 | * |
|  | 8,9 | 12,14 | 11,14 | 19,19 | 11,12 | 10,11 |
|  | 15,17 | 12,13 | 31,35 | 14,17 | X, Y | 10,10 |
|  | 22,27 | 6,12 | 7,8 | 18,19 | 7,7 | 9,11 |
|  | 16,18 | 10 | 16 | 17 | 2 |  |
| 3-Semen | 11,12 | 19,22 | 14,14 | 15,15 | 9,10 | * |
|  | 9,10 | 14,14 | 13,14 | 18,21 | 11,13 | 12,12 |
|  | 14,17 | 13,14 | 30,30 | 14,16 | X, Y | 10,11 |
|  | 25,25 | 9,9 | 12,13 | 19,28.2 | 9,9.3 | 8,11 |
|  | 15,17 | 12 | 17 | 18 | 2 |  |
| 4 | 12,14 | 17,17 | 12,13 | 14,17 | 9,11 | * |
|  | 8,9 | 12,14 | 11,14 | 19,19 | 11,12 | 10,11 |
|  | 15,17 | 12,13 | 31,35 | 14,17 | X, Y | 10,10 |
|  | 22,27 | 6,12 | 7,8 | 18,19 | 7,7 | 9,11 |
|  | 16,18 | 10 | 16 | 17 | 2 |  |

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

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

Manufacturer's Information, continued Test No. 23-5802: DNA-Semen

| YSTR Results |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Results compiled from predistribution laboratories and a consensus of at least 10 participants. |  |  |  |  |  |  |  |  |
|  | DYF387S 1 | 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 |
| 1 | 35,36 | 14 | 11,14 | 12 | 28 | 26 | 10 | 13 | 12 |
|  | 15 | 12 | 11 | 19 | 29 | 17 | 16 | 10 | 23 |
|  | 39 | 12 | 14 | 16 | 17 | 20 | 24 | 9 | 12 |
| 2 | 35,36 | 15 | 11,14 | 13 | 29 | 25 | 12 | 13 | 13 |
|  | 15 | 12 | 12 | 19 | 29 | 14 | 16 | 11 | 22 |
|  | 38 | 12 | 12 | 17 | 18 | 21 | 24 | 10 | 12 |
| 3-Blood | 35,36 | 14 | 11,14 | 12 | 28 | 26 | 10 | 13 | 12 |
|  | 15 | 12 | 11 | 19 | 29 | 17 | 16 | 10 | 23 |
|  | 39 | 12 | 14 | 16 | 17 | 20 | 24 | 9 | 12 |
| 3-Semen | 35,36 | 15 | 11,14 | 13 | 29 | 25 | 12 | 13 | 13 |
|  | 15 | 12 | 12 | 19 | 29 | 14 | 16 | 11 | 22 |
|  | 38 | 12 | 12 | 17 | 18 | 21 | 24 | 10 | 12 |
| 4 | 35,36 | 14 | 11,14 | 12 | 28 | 26 | 10 | 13 | 12 |
|  | 15 | 12 | 11 | 19 | 29 | 17 | 16 | 10 | 23 |
|  | 39 | 12 | 14 | 16 | 17 | 20 | 24 | 9 | 12 |

