



## **DNA-Semen Test No. 22-5802**

### **Summary Report**

Each participant received a sample pack consisting of two known bloodstains and two questioned stains which they were requested to analyze using their existing protocols. Data were returned from 195 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 on FTA cards (Items 1 & 2), and two questioned stains on clean, colored fabric (Item 3 & 4). Participants were requested to analyze these items using their existing protocols.

**SAMPLE PREPARATION:** The stains in Items 1, 2, and 3 were prepared from human whole blood which was either drawn into citric acid preservative bags or EDTA tubes. The stain in Item 4 was a mixture prepared from human whole blood and semen. The semen sample was first thawed and mixed 1:1 with TAE buffer, then mixed 1:1 with the blood. Item 1 (75  $\mu$ l) was prepared using blood collected from a female donor. Item 2 (75  $\mu$ l) was created using blood collected from a male donor. Item 3 (50  $\mu$ l) was created using blood collected from a male donor, but one different than that of Item 2. Item 4 (50  $\mu$ l) was created using a mixture of blood from the female donor used in Item 1 and semen from the male donor used in Item 2. 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 February 28, 2022 following completion of verification stage.

**SAMPLE SET ASSEMBLY:** For each sample set, all four Items (1-4) were packed into separate envelopes and then placed together in a pre-labeled sample pack envelope and sealed. 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:** Laboratories that conducted predistribution analysis of the samples reported consistent allelic results and confirmed the manufacturer's expected associations.

## Manufacturer's Information, continued

### ***Amelogenin and STR Results***

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

| 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       | 16,18.3<br>10,10<br>13,16<br>20,21<br>14,17 | 21,26<br>10,14<br>13,15<br>9,9<br>NM     | 11,12<br>14,16<br>31,32.2<br>5,10<br>NM      | 15,17<br>17,21<br>15,15<br>19,24.2<br>NM   | 11,12<br>13,13<br>X,X<br>6,7<br>NM  | *       |
| 2       | 14,16.3<br>9,11<br>16,17<br>20,22<br>14,17  | 17,24<br>13,13<br>15,16.2<br>12,14<br>11 | 11,14<br>13,14<br>30,30<br>10,14<br>17       | 16,18<br>18,21<br>15,16<br>29.2,29.2<br>19 | 11,12<br>11,14<br>X,Y<br>9,9.3<br>2 | *       |
| 3       | 15,15.3<br>7,11<br>13,14<br>20,23<br>17,17  | 20,25<br>13,13<br>13,16<br>9,13<br>10    | 11.3,14<br>14,14<br>31.2,31.2<br>12,13<br>19 | 14,17<br>18,19<br>15,17<br>16,17<br>20     | 12,13<br>9,9<br>X,Y<br>7,9.3<br>2   | *       |
| 4-Blood | 16,18.3<br>10,10<br>13,16<br>20,21<br>14,17 | 21,26<br>10,14<br>13,15<br>9,9<br>NM     | 11,12<br>14,16<br>31,32.2<br>5,10<br>NM      | 15,17<br>17,21<br>15,15<br>19,24.2<br>NM   | 11,12<br>13,13<br>X,X<br>6,7<br>NM  | *       |
| 4-Semen | 14,16.3<br>9,11<br>16,17<br>20,22<br>14,17  | 17,24<br>13,13<br>15,16.2<br>12,14<br>11 | 11,14<br>13,14<br>30,30<br>10,14<br>17       | 16,18<br>18,21<br>15,16<br>29.2,29.2<br>19 | 11,12<br>11,14<br>X,Y<br>9,9.3<br>2 | *       |

### ***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         | Y GATA H4      |
| 2       | 35,36<br>15<br>38 | 14<br>12<br>12 | 11,14<br>12<br>12 | 13<br>19<br>17 | 29<br>30<br>19 | 24<br>15<br>23 | 11<br>17<br>23   | 14<br>11<br>10 | 12<br>22<br>13 |
| 3       | 37,40<br>14<br>41 | 14<br>11<br>12 | 16,16<br>10<br>12 | 13<br>20<br>19 | 29<br>28<br>20 | 25<br>17<br>21 | 10<br>16.2<br>21 | 13<br>11<br>9  | 12<br>26<br>10 |
| 4-Semen | 35,36<br>15<br>38 | 14<br>12<br>12 | 11,14<br>12<br>12 | 13<br>19<br>17 | 29<br>30<br>19 | 24<br>15<br>23 | 11<br>17<br>23   | 14<br>11<br>10 | 12<br>22<br>13 |

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

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

## Summary Comments

The 22-5802 DNA-Semen test is part of the DNA Sample Specific Series, where participants are advised of the body fluid(s) that made up the questioned stains. The test is designed to allow participants to assess their proficiency in the analysis of dried stains. Participants were supplied with two "known" bloodstains (Items 1 and 2) and two "questioned" stains (Items 3 and 4). Item 1 was prepared using blood collected from a female donor. Item 2 was created using blood collected from a male donor. Item 3 was created using blood collected from a male donor, but one different than that of Item 2. Item 4 was created using a mixture of blood from the female donor used in Item 1 and semen from the male donor used in Item 2. (See Manufacturer's Information for preparation details)

Of the 195 participants that returned results, 165 reported DNA interpretations. Three participants did not respond, 25 stated that the samples were analyzed for database purposes only, and two selected the "No Interpretations" option for all Interpretation questions.

For the Item 3 stain, all responding participants excluded the victim (Item 1) as a possible contributor. All but two participants excluded the suspect (Item 2) as a possible contributor. The two remaining participants included the suspect (Item 2) as a possible contributor.

For the Item 4 stain, all but one participant included the victim (Item 1) as a possible contributor. The remaining participant excluded the victim (Item 1) as a possible contributor. All responding participants included the suspect (Item 2) as a possible contributor.

A total of 38 participants reported the use of Probabilistic Genotyping (PG) software on either solely the questioned items or all four items. One of these participants reported additional alleles at several loci. Based on the interpretations described above, these inconsistencies did not appear to affect the participant's conclusions.

For Item 4-Semen, five participants reported the alleles "18,20,21" at locus D12S391. A majority of these participants noted that the "20" allele is likely elevated stutter. One of these participants included the suspect (Item 2) as a contributor to the Item 3 stain. The remaining participants' conclusions did not appear to be affected by the inconsistency.

# STR Amplification Kit(s) & Results

TABLE 1

| WebCode | Amplification Kits (Probabilistic Genotyping Software) |            |            |            |            |         |
|---------|--|------------|------------|------------|------------|---------|
|         | D1S1656  | D2S1338    | D2S441     | D3S1358    | D5S818     | D6S1043 |
| Item    | 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    |         |
|         | <b>Item 1 - STR Results</b>                            |            |            |            |            |         |
| 2JRNH2  | PowerPlex® Fusion 6C                                   |            |            |            |            |         |
|         | 16,18,3  | 21,26      | 11,12      | 15,17      | 11,12      |         |
| 1       | 10,10  | 10,14      | 14,16      | 17,21      | 13,13      | 9,14    |
|         | 13,16  | 13,15      | 31,32,2    | 15,15      | X,X        | 10,11   |
|         | 20,21  | 9,9        | 5,10       | 19,24,2    | 6,7        | 8,11    |
|         | 14,17  |            |            |            |            |         |
| 2TUB6R  | GlobalFiler™ Express                                   |            |            |            |            |         |
|         | 16,18,3  | 21,26      | 11,12      | 15,17      | 11,12      |         |
| 1       | 10   | 10,14      | 14,16      | 17,21      | 13         | 9,14    |
|         | 13,16  | 13,15      | 31,32,2    | 15         | X          | 10,11   |
|         | 20,21  |            |            | 19,24,2    | 6,7        | 8,11    |
|         | 14,17  | No results |            |            | No results |         |
| 2VNYNN  | PowerPlex® Fusion 6C, GlobalFiler™                     |            |            |            |            |         |
|         | 16,18,3  | 21,26      | 11,12      | 15,17      | 11,12      |         |
| 1       | 10,10  | 10,14      | 14,16      | 17,21      | 13,13      | 9,14    |
|         | 13,16  | 13,15      | 31,32,2    | 15,15      | X,X        | 10,11   |
|         | 20,21  |            |            | 19,24,2    | 6,7        | 8,11    |
|         | 14,17  | N.D.       |            |            | N.D.       |         |
| 38ZG4X  | PowerPlex® Fusion 6C                                   |            |            |            |            |         |
|         | 16,18,3  | 21,26      | 11,12      | 15,17      | 11,12      |         |
| 1       | 10,10  | 10,14      | 14,16      | 17,21      | 13,13      | 9,14    |
|         | 13,16  | 13,15      | 31,32,2    | 15,15      | X,X        | 10,11   |
|         | 20,21  | 9,9        | 5,10       | 19,24,2    | 6,7        | 8,11    |
|         | 14,17  | No results | No results | No results | No results |         |
| 3BW84H  | GlobalFiler™   |            |            |            |            |         |
|         | 16,18,3  | 21,26      | 11,12      | 15,17      | 11,12      |         |
| 1       | 10   | 10,14      | 14,16      | 17,21      | 13         | 9,14    |
|         | 13,16  | 13,15      | 31,32,2    | 15         | X          | 10,11   |
|         | 20,21  |            |            | 19,24,2    | 6,7        | 8,11    |
|         | 14,17  |            |            |            |            |         |
| 3C4MEU  | GlobalFiler™ Express                                   |            |            |            |            |         |
|         | 16,18,3  | 21,26      | 11,12      | 15,17      | 11,12      |         |
| 1       | 10,10  | 10,14      | 14,16      | 17,21      | 13,13      | 9,14    |
|         | 13,16  | 13,15      | 31,32,2    | 15,15      | X,X        | 10,11   |
|         | 20,21  |            |            | 19,24,2    | 6,7        | 8,11    |
|         | 14,17  | No Results |            |            | No Results |         |

TABLE 1

| WebCode              |                       | 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 |                       |  |          |          |            |         |  |
| 3DZ6CP               | GlobalFiler™          |  |          |          |            |         |  |
|                      | 16,18.3               | 21,26  | 11,12    | 15,17    | 11,12      |         |  |
| 1                    | 10                    | 10,14  | 14,16    | 17,21    | 13         | 9,14    |  |
|                      | 13,16                 | 13,15  | 31,32.2  | 15       | X,X        | 10,11   |  |
|                      | 20,21                 |  |          | 19,24.2  | 6,7        | 8,11    |  |
|                      | 14,17                 |  |          |          |            |         |  |
| 3NYTCY               | GlobalFiler™ (STRmix) |  |          |          |            |         |  |
|                      | 16,18.3               | 21,26  | 11,12    | 15,17    | 11,12      |         |  |
| 1                    | 10                    | 10,14  | 14,16    | 17,21    | 13         | 9,14    |  |
|                      | 13,16                 | 13,15  | 31,32.2  | 15       | X          | 10,11   |  |
|                      | 20,21                 |  |          | 19,24.2  | 6,7        | 8,11    |  |
|                      | 14,17                 |  |          |          |            |         |  |
| 3PGKN4               | GlobalFiler™          |  |          |          |            |         |  |
|                      | 16,18.3               | 21,26  | 11,12    | 15,17    | 11,12      |         |  |
| 1                    | 10,10                 | 10,14  | 14,16    | 17,21    | 13,13      | 9,14    |  |
|                      | 13,16                 | 13,15  | 31,32.2  | 15,15    | X,X        | 10,11   |  |
|                      | 20,21                 |  |          | 19,24.2  | 6,7        | 8,11    |  |
|                      | 14,17                 |  |          |          |            |         |  |
| 44TKTT               | GlobalFiler™ Express  |  |          |          |            |         |  |
|                      | 16,18.3               | 21,26  | 11,12    | 15,17    | 11,12      |         |  |
| 1                    | 10,10                 | 10,14  | 14,16    | 17,21    | 13,13      | 9,14    |  |
|                      | 13,16                 | 13,15  | 31,32.2  | 15,15    | X,X        | 10,11   |  |
|                      | 20,21                 |  |          | 19,24.2  | 6,7        | 8,11    |  |
|                      | 14,17                 | No Results   |          |          | No Results |         |  |
| 4EQNTG               | GlobalFiler™          |  |          |          |            |         |  |
|                      | 16,18.3               | 21,26  | 11,12    | 15,17    | 11,12      |         |  |
| 1                    | 10                    | 10,14  | 14,16    | 17,21    | 13         | 9,14    |  |
|                      | 13,16                 | 13,15  | 31,32.2  | 15       | X,X        | 10,11   |  |
|                      | 20,21                 |  |          | 19,24.2  | 6,7        | 8,11    |  |
|                      | 14,17                 |  |          |          |            |         |  |
| 4GD3HQ               | PowerPlex® Fusion     |  |          |          |            |         |  |
|                      | 16,18.3               | 21,26  | 11,12    | 15,17    | 11,12      |         |  |
| 1                    | 10                    | 10,14  | 14,16    | 17,21    | 13         | 9,14    |  |
|                      | 13,16                 | 13,15  | 31,32.2  | 15       | X          | 10,11   |  |
|                      | 20,21                 | 9  | 5,10     |          | 6,7        | 8,11    |  |
|                      | 14,17                 | NR   |          |          |            |         |  |
| 4NEG6D               | GlobalFiler™          |  |          |          |            |         |  |
|                      | 16,18.3               | 21,26  | 11,12    | 15,17    | 11,12      |         |  |
| 1                    | 10                    | 10,14  | 14,16    | 17,21    | 13         | 9,14    |  |
|                      | 13,16                 | 13,15  | 31,32.2  | 15       | X          | 10,11   |  |
|                      | 20,21                 |  |          | 19,24.2  | 6,7        | 8,11    |  |
|                      | 14,17                 |  |          |          |            |         |  |

TABLE 1

| WebCode | 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

|        |                       |       |         |         |       |       |
|--------|-----------------------|-------|---------|---------|-------|-------|
| 4X46XU | GlobalFiler™ Express  |       |         |         |       |       |
|        | 16,18.3               | 21,26 | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                    | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                 | 13,15 | 31,32.2 | 15      | X,X   | 10,11 |
|        | 20,21                 |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 | NM    |         |         | NM    |       |
| 4YWYXK | GlobalFiler™          |       |         |         |       |       |
|        | 16,18.3               | 21,26 | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                    | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                 | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                 |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 |       |         |         |       |       |
| 66H4ER | PowerPlex® Fusion 6C  |       |         |         |       |       |
|        | 16,18.3               | 21,26 | 11,12   | 15,17   | 11,12 |       |
| 1      | 10,10                 | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                 | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                 | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 | NR    | NR      | NR      |       |       |
| 66J9KM | GlobalFiler™          |       |         |         |       |       |
|        | 16,18.3               | 21,26 | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                    | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                 | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                 |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 |       |         |         |       |       |
| 69HFAR | PowerPlex® Fusion 6C  |       |         |         |       |       |
|        | 16,18.3               | 21,26 | 11,12   | 15,17   | 11,12 |       |
| 1      | 10,10                 | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                 | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                 | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 | NR    | NR      | NR      |       |       |
| 69HJGM | GlobalFiler™          |       |         |         |       |       |
|        | 16,18.3               | 21,26 | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                    | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                 | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                 |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 |       |         |         |       |       |
| 6JJRHE | GlobalFiler™ (STRmix) |       |         |         |       |       |
|        | 16,18.3               | 21,26 | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                    | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                 | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                 |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 |       |         |         |       |       |

TABLE 1

| <b>WebCode Amplification Kits (Probabilistic Genotyping Software)</b> |                      |                |                 |                 |                   |                |
|---|----------------------|----------------|-----------------|-----------------|-------------------|----------------|
| <b>Item</b>   | <b>D1S1656</b>       | <b>D2S1338</b> | <b>D2S441</b>   | <b>D3S1358</b>  | <b>D5S818</b>     | <b>D6S1043</b> |
|   | <b>D7S820</b>        | <b>D8S1179</b> | <b>D10S1248</b> | <b>D12S391</b>  | <b>D13S317</b>    | <b>D16S539</b> |
|   | <b>D18S51</b>        | <b>D19S433</b> | <b>D21S11</b>   | <b>D22S1045</b> | <b>Amelogenin</b> | <b>CSF1PO</b>  |
|   | <b>FGA</b>           | <b>Penta D</b> | <b>Penta E</b>  | <b>SE33</b>     | <b>TH01</b>       | <b>TPOX</b>    |
|   | <b>vWA</b>           | <b>DYS391</b>  | <b>DYS570</b>   | <b>DYS576</b>   | <b>Y Indel</b>    |                |
| <b>Item 1 - STR Results</b>   |                      |                |                 |                 |                   |                |
| 6K9DTG  | GlobalFiler™ Express |                |                 |                 |                   |                |
|   | 16,18.3              | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                   | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                | No results     |                 |                 | No results        |                |
| 6YP97R  | Investigator® 24plex |                |                 |                 |                   |                |
|   | 16,18.3              | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                | No Results     |                 |                 |                   |                |
| 7A93XE  | PowerPlex® Fusion 6C |                |                 |                 |                   |                |
|   | 16,18.3              | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                | 9,9            | 5,10            | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                |                |                 |                 |                   |                |
| 7HHCMT  | GlobalFiler™ Express |                |                 |                 |                   |                |
|   | 16,18.3              | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                   | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                | 13,15          | 31,32.2         | 15              | X,X               | 10,11          |
|   | 20,21                |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                | NM             |                 |                 | NM                |                |
| 7HYN3D  | GlobalFiler™         |                |                 |                 |                   |                |
|   | 16,18.3              | 21,26          | 11,12           | 15,17           | 11,12             | --             |
| 1   | 10,10                | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                | --             | --              | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                | --             | --              | --              | --                | --             |
| 7KLAUF  | PowerPlex® Fusion 6C |                |                 |                 |                   |                |
|   | 16,18.3              | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                | 9,9            | 5,10            | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                |                |                 |                 |                   |                |
| 7KM3RM  | GlobalFiler™ Express |                |                 |                 |                   |                |
|   | 16,18.3              | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                   | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                | No Results     |                 |                 | No Results        |                |

TABLE 1

| WebCode | 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

|        |                          |            |         |         |       |       |
|--------|--------------------------|------------|---------|---------|-------|-------|
| 7NUB3T | PowerPlex® Fusion 6C     |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10,10                    | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    | ND         | ND      | ND      |       |       |
| 7QE6YT | PowerPlex® 5C            |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10,10                    | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                    | No Results |         |         |       |       |
| 7QHPR3 | Investigator® 24plex GO! |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                       | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |            |         |         |       |       |
| 7QVJ83 | Investigator® 24plex GO! |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                       | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |            |         |         |       |       |
| 7RQ4RG | GlobalFiler™             |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                       | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |            |         |         |       |       |
| 7RRYFT | PowerPlex® 5C            |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10,10                    | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                    | No Results |         |         |       |       |
| 7VRGN3 | GlobalFiler™             |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                       | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |            |         |         |       |       |

TABLE 1

| WebCode | 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

|        |                               |            |         |         |       |       |
|--------|-------------------------------|------------|---------|---------|-------|-------|
| 842QMZ | Investigator® 24plex GO!      |            |         |         |       |       |
| 1      | 16,18.3                       | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10                            | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                         |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                         |            |         |         |       |       |
| 8CTDAP | Investigator® 24plex          |            |         |         |       |       |
| 1      | 16,18.3                       | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                         | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                         |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                         | No Results |         |         |       |       |
| 8DQFJN | PowerPlex® Fusion 6C (STRmix) |            |         |         |       |       |
| 1      | 16,18.3                       | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                         | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                         | 9,9        | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                         | NR         | NR      | NR      |       |       |
| 8HF27G | GlobalFiler™                  |            |         |         |       |       |
| 1      | 16,18.3                       | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10                            | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                         |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                         |            |         |         |       |       |
| 8KJYFN | PowerPlex® Fusion 5C          |            |         |         |       |       |
| 1      | 16,18.3                       | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                         | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                         | 9,9        | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                         | No Results |         |         |       |       |
| 96QUX2 | Identifier® Plus              |            |         |         |       |       |
| 1      |                               | 21,26      |         | 15,17   | 11,12 |       |
|        | 10,10                         | 10,14      |         |         | 13,13 | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2 |         | X,X   | 10,11 |
|        | 20,21                         |            |         |         | 6,7   | 8,11  |
|        | 14,17                         |            |         |         |       |       |
| 97JFFC | GlobalFiler™                  |            |         |         |       |       |
| 1      | 16,18.3                       | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10                            | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2 | 15      | X,X   | 10,11 |
|        | 20,21                         |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                         |            |         |         |       |       |

TABLE 1

| WebCode | 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                                   |            |          |          |            |         |
| 9DG8LK  | GlobalFiler™ Express                                   |            |          |          |            |         |
|         | 16,18.3  | 21,26      | 11,12    | 15,17    | 11,12      |         |
| 1       | 10   | 10,14      | 14,16    | 17,21    | 13         | 9,14    |
|         | 13,16  | 13,15      | 31,32.2  | 15       | X          | 10,11   |
|         | 20,21  |            |          | 19,24.2  | 6,7        | 8,11    |
|         | 14,17  | No Results |          |          | No Results |         |
| 9K227W  | Investigator® 24plex GO!                               |            |          |          |            |         |
|         | 16,18.3  | 21,26      | 11,12    | 15,17    | 11,12      | N/A     |
| 1       | 10   | 10,14      | 14,16    | 17,21    | 13         | 9,14    |
|         | 13,16  | 13,15      | 31,32.2  | 15       | X          | 10,11   |
|         | 20,21  | N/A        | N/A      | 19,24.2  | 6,7        | 8,11    |
|         | 14,17  | N/A        | N/A      | N/A      | N/A        |         |
| 9LAHWF  | GlobalFiler™   |            |          |          |            |         |
|         | 16,18.3  | 21,26      | 11,12    | 15,17    | 11,12      |         |
| 1       | 10   | 10,14      | 14,16    | 17,21    | 13         | 9,14    |
|         | 13,16  | 13,15      | 31,32.2  | 15       | X          | 10,11   |
|         | 20,21  |            |          | 19,24.2  | 6,7        | 8,11    |
|         | 14,17  |            |          |          |            |         |
| 9NXWKP  | Identifier® Direct                                     |            |          |          |            |         |
|         |  | 21,26      |          | 15,17    | 11,12      |         |
| 1       | 10   | 10,14      |          |          | 13         | 9,14    |
|         | 13,16  | 13,15      | 31,32.2  |          | X,X        | 10,11   |
|         | 20,21  |            |          |          | 6,7        | 8,11    |
|         | 14,17  |            |          |          |            |         |
| 9PWWNV  | PowerPlex® Fusion 6C                                   |            |          |          |            |         |
|         | 16,18.3  | 21,26      | 11,12    | 15,17    | 11,12      |         |
| 1       | 10,10  | 10,14      | 14,16    | 17,21    | 13,13      | 9,14    |
|         | 13,16  | 13,15      | 31,32.2  | 15,15    | X,X        | 10,11   |
|         | 20,21  | 9,9        | 5,10     | 19,24.2  | 6,7        | 8,11    |
|         | 14,17  |            |          |          |            |         |
| 9QAJ6P  | PowerPlex® Fusion 6C                                   |            |          |          |            |         |
|         | 16,18.3  | 21,26      | 11,12    | 15,17    | 11,12      |         |
| 1       | 10,10  | 10,14      | 14,16    | 17,21    | 13,13      | 9,14    |
|         | 13,16  | 13,15      | 31,32.2  | 15,15    | X,X        | 10,11   |
|         | 20,21  | 9,9        | 5,10     | 19,24.2  | 6,7        | 8,11    |
|         | 14,17  | NR         | NR       | NR       |            |         |
| 9U79LW  | Investigator® 24plex GO!                               |            |          |          |            |         |
|         | 16,18.3  | 21,26      | 11,12    | 15,17    | 11,12      |         |
| 1       | 10   | 10,14      | 14,16    | 17,21    | 13         | 9,14    |
|         | 13,16  | 13,15      | 31,32.2  | 15       | X          | 10,11   |
|         | 20,21  |            |          | 19,24.2  | 6,7        | 8,11    |
|         | 14,17  |            |          |          |            |         |

TABLE 1

| WebCode | 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

|        |                       |            |         |         |            |       |
|--------|-----------------------|------------|---------|---------|------------|-------|
| 9V3NTM | PowerPlex® Fusion 6C  |            |         |         |            |       |
|        | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12      |       |
| 1      | 10,10                 | 10,14      | 14,16   | 17,21   | 13,13      | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15,15   | X,X        | 10,11 |
|        | 20,21                 | 9,9        | 5,10    | 19,24.2 | 6,7        | 8,11  |
|        | 14,17                 | No Results |         |         |            |       |
| 9ZEG6L | GlobalFiler™ Express  |            |         |         |            |       |
|        | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12      |       |
| 1      | 10                    | 10,14      | 14,16   | 17,21   | 13         | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15      | X          | 10,11 |
|        | 20,21                 |            |         | 19,24.2 | 6,7        | 8,11  |
|        | 14,17                 | No results |         |         | No results |       |
| A3GYH8 | PowerPlex® Fusion 5C  |            |         |         |            |       |
|        | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12      |       |
| 1      | 10                    | 10,14      | 14,16   | 17,21   | 13         | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15      | X          | 10,11 |
|        | 20,21                 | 9          | 5,10    |         | 6,7        | 8,11  |
|        | 14,17                 |            |         |         |            |       |
| A6LKEK | PowerPlex® Fusion 6C  |            |         |         |            |       |
|        | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12      |       |
| 1      | 10,10                 | 10,14      | 14,16   | 17,21   | 13,13      | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15,15   | X,X        | 10,11 |
|        | 20,21                 | 9,9        | 5,10    | 19,24.2 | 6,7        | 8,11  |
|        | 14,17                 | NR         | NR      | NR      |            |       |
| A86L98 | PowerPlex® Fusion 6C  |            |         |         |            |       |
|        | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12      |       |
| 1      | 10                    | 10,14      | 14,16   | 17,21   | 13         | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15      | X          | 10,11 |
|        | 20,21                 | 9          | 5,10    | 19,24.2 | 6,7        | 8,11  |
|        | 14,17                 |            |         |         |            |       |
| A9Z4B9 | GlobalFiler™ (STRmix) |            |         |         |            |       |
|        | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12      |       |
| 1      | 10                    | 10,14      | 14,16   | 17,21   | 13         | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15      | X          | 10,11 |
|        | 20,21                 |            |         | 19,24.2 | 6,7        | 8,11  |
|        | 14,17                 |            |         |         |            |       |
| ADY9CT | PowerPlex® Fusion     |            |         |         |            |       |
|        | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12      |       |
| 1      | 10,10                 | 10,14      | 14,16   | 17,21   | 13,13      | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15,15   | X,X        | 10,11 |
|        | 20,21                 | 9,9        | 5,10    |         | 6,7        | 8,11  |
|        | 14,17                 | N.R.       |         |         |            |       |

TABLE 1

| WebCode | 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

|        |                          |            |            |            |       |       |
|--------|--------------------------|------------|------------|------------|-------|-------|
| AF3DJL | PowerPlex® Fusion        |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10       |            | 6,7   | 8,11  |
|        | 14,17                    | No Results |            |            |       |       |
| AGXWKM | PowerPlex® Fusion 5C     |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10       |            | 6,7   | 8,11  |
|        | 14,17                    | No Results |            |            |       |       |
| AJ2MUN | PowerPlex® Fusion 6C     |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10       | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    | No Results | No Results | No Results |       |       |
| APBNBL | PowerPlex® Fusion        |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10                       | 10,14      | 14,16      | 17,21      | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15         | X     | 10,11 |
|        | 20,21                    | 9          | 5,10       |            | 6,7   | 8,11  |
|        | 14,17                    | NR         |            |            |       |       |
| ATNQTB | PowerPlex® Fusion 6C     |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10       | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    |            |            |            |       |       |
| AZB8WL | PowerPlex® Fusion 6C     |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10       | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    | NR         | NR         | NR         |       |       |
| B63VQY | Investigator® 24plex GO! |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10                       | 10,14      | 14,16      | 17,21      | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15         | X     | 10,11 |
|        | 20,21                    |            |            | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    |            |            |            |       |       |

TABLE 1

| WebCode | 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

|        |                            |       |         |         |       |       |
|--------|----------------------------|-------|---------|---------|-------|-------|
| B6LNKG | PowerPlex® Fusion          |       |         |         |       |       |
| 1      | 16,18.3                    | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                         | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                      | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                      | 9     | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                      | NR    |         |         |       |       |
| B6Y9DQ | GlobalFiler™ (STRmix v2.7) |       |         |         |       |       |
| 1      | 16,18.3                    | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                         | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                      | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                      |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                      |       |         |         |       |       |
| B6ZBXP | Investigator® 24plex       |       |         |         |       |       |
| 1      | 16,18.3                    | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                      | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                      | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                      |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                      | N/A   |         |         |       |       |
| BB6A8T | PowerPlex® Fusion 6C       |       |         |         |       |       |
| 1      | 16,18.3                    | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                      | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                      | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                      | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                      |       |         |         |       |       |
| BJYCFW | Investigator® 24plex GO!   |       |         |         |       |       |
| 1      | 16,18.3                    | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                         | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                      | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                      |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                      |       |         |         |       |       |
| BVBMYF | PowerPlex® Fusion          |       |         |         |       |       |
| 1      | 16,18.3                    | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                         | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                      | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                      | 9     | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                      | NR    |         |         |       |       |
| BWBHTK | PowerPlex® Fusion 6C       |       |         |         |       |       |
| 1      | 16,18.3                    | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                      | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                      | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                      | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                      | NR    | NR      | NR      |       |       |

TABLE 1

| WebCode | 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

|        |                                     |            |         |         |       |       |
|--------|-------------------------------------|------------|---------|---------|-------|-------|
| BYBTHR | PowerPlex® Fusion 6C                |            |         |         |       |       |
| 1      | 16,18.3                             | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                               | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                               | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                               | 9,9        | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                               |            |         |         |       |       |
| BYUJM7 | PowerPlex® Fusion 6C (STRmix 2.6.3) |            |         |         |       |       |
| 1      | 16,18.3                             | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10                                  | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                               | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                               | 9          | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                               |            |         |         |       |       |
| C3NZD6 | PowerPlex® Fusion 6C                |            |         |         |       |       |
| 1      | 16,18.3                             | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                               | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                               | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                               | 9,9        | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                               |            |         |         |       |       |
| C4JHE7 | GlobalFiler™ (STRmix)               |            |         |         |       |       |
| 1      | 16,18.3                             | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10                                  | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                               | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                               |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                               |            |         |         |       |       |
| CYRCXJ | Investigator® 24plex                |            |         |         |       |       |
| 1      | 16,18.3                             | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                               | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                               | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                               |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                               | No Results |         |         |       |       |
| D8JYDL | GlobalFiler™ (STRmix)               |            |         |         |       |       |
| 1      | 16,18.3                             | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10                                  | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                               | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                               |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                               |            |         |         |       |       |
| DHVD89 | PowerPlex® Fusion 6C                |            |         |         |       |       |
| 1      | 16,18.3                             | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                               | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                               | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                               | 9,9        | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                               |            |         |         |       |       |

TABLE 1

| <b>WebCode Amplification Kits (Probabilistic Genotyping Software)</b> |                                    |                |                 |                 |                   |                |
|---|------------------------------------|----------------|-----------------|-----------------|-------------------|----------------|
| <b>Item</b>   | <b>D1S1656</b>                     | <b>D2S1338</b> | <b>D2S441</b>   | <b>D3S1358</b>  | <b>D5S818</b>     | <b>D6S1043</b> |
|   | <b>D7S820</b>                      | <b>D8S1179</b> | <b>D10S1248</b> | <b>D12S391</b>  | <b>D13S317</b>    | <b>D16S539</b> |
|   | <b>D18S51</b>                      | <b>D19S433</b> | <b>D21S11</b>   | <b>D22S1045</b> | <b>Amelogenin</b> | <b>CSF1PO</b>  |
|   | <b>FGA</b>                         | <b>Penta D</b> | <b>Penta E</b>  | <b>SE33</b>     | <b>TH01</b>       | <b>TPOX</b>    |
|   | <b>vWA</b>                         | <b>DYS391</b>  | <b>DYS570</b>   | <b>DYS576</b>   | <b>Y Indel</b>    |                |
| <b>Item 1 - STR Results</b>   |                                    |                |                 |                 |                   |                |
| DK4N4C  | PowerPlex® Fusion 6C, GlobalFiler™ |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | Not Detected   |                 |                 | Not Detected      |                |
| EHT7HK  | Identifier® Direct                 |                |                 |                 |                   |                |
|   |                                    | 21,26          |                 | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          |                 |                 | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         |                 | X,X               | 10,11          |
|   | 20,21                              |                |                 |                 | 6,7               | 8,11           |
|   | 14,17                              |                |                 |                 |                   |                |
| EM9GT4  | GlobalFiler™ (STRmix)              |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X                 | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              |                |                 |                 |                   |                |
| EPD3PG  | PowerPlex® 5C                      |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              | 9,9            | 5,10            | Not Tested      | 6,7               | 8,11           |
|   | 14,17                              | No Results     |                 |                 |                   |                |
| EQQN4P  | PowerPlex® Fusion                  |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              | 9,9            | 5,10            |                 | 6,7               | 8,11           |
|   | 14,17                              | NR             |                 |                 |                   |                |
| EU74PA  | GlobalFiler™                       |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                              | 9,9            |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              |                |                 |                 |                   |                |
| EVH3JJ  | GlobalFiler™ Express               |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | NM             |                 |                 | NM                |                |

TABLE 1

| WebCode 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**

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| EW DLLK | PowerPlex® Fusion 5C |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 |  | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| EWUHDK | GlobalFiler™ |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 |  |  | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| F3X4G8 | GlobalFiler™ IQC |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 |  |  | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| FB9639 | PowerPlex® Fusion 6C, GlobalFiler™ |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10 | 10,14 | 14,16 | 17,21 | 13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15 | X,X | 10,11 |
|  | 20,21 | 9 | 5,10 | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 | / | / | / | / |  |
| FCJ62N | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| FFHGWN | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| FMJTWQ | Investigator® 24plex GO! |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10 | 10,14 | 14,16 | 17,21 | 13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15 | X | 10,11 |
|  | 20,21 |  |  | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |

TABLE 1

| WebCode | 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

|        |                               |       |         |         |       |       |
|--------|-------------------------------|-------|---------|---------|-------|-------|
| FQLUXN | PowerPlex® Fusion             |       |         |         |       |       |
| 1      | 16,18.3                       | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                         | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                         | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                         | 9,9   | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                         | NR    |         |         |       |       |
| G7B4CD | PowerPlex® Fusion             |       |         |         |       |       |
| 1      | 16,18.3                       | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                            | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                         | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                         | 9     | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                         | NR    |         |         |       |       |
| G8BY6H | PowerPlex® Fusion 6C (STRmix) |       |         |         |       |       |
| 1      | 16,18.3                       | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                         | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                         | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                         | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                         | NR    | NR      | NR      |       |       |
| GHP2H3 | PowerPlex® Fusion 5C          |       |         |         |       |       |
| 1      | 16,18.3                       | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                            | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                         | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                         | 9     | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                         |       |         |         |       |       |
| GJZ8F4 | PowerPlex® Fusion 6C          |       |         |         |       |       |
| 1      | 16,18.3                       | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                         | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                         | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                         | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                         |       |         |         |       |       |
| GQXUBA | PowerPlex® Fusion             |       |         |         |       |       |
| 1      | 16,18.3                       | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                            | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                         | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                         | 9     | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                         | NR    |         |         |       |       |
| GRRJT6 | PowerPlex® Fusion 5C          |       |         |         |       |       |
| 1      | 16,18.3                       | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                            | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                         | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                         | 9     | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                         |       |         |         |       |       |

TABLE 1

| WebCode | 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

|        |                          |            |            |            |       |       |
|--------|--------------------------|------------|------------|------------|-------|-------|
| GUGRYZ | GlobalFiler™ (STRmix)    |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10                       | 10,14      | 14,16      | 17,21      | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15         | X     | 10,11 |
|        | 20,21                    |            |            | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    |            |            |            |       |       |
| GWRMRJ | PowerPlex® 6C            |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10       | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    | No Results | No Results | No Results |       |       |
| GXLBAE | PowerPlex® Fusion 6C     |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10       | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    | NR         | NR         | NR         |       |       |
| GZQ2CN | Investigator® 24plex GO! |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10                       | 10,14      | 14,16      | 17,21      | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15         | X     | 10,11 |
|        | 20,21                    |            |            | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    |            |            |            |       |       |
| H42DQF | PowerPlex® Fusion 6C     |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10       | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    | No Results | No Results | No Results |       |       |
| H4LAWN | GlobalFiler™             |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    |            |            | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    |            |            |            |       |       |
| HBKL7Z | PowerPlex® Fusion 6C     |            |            |            |       |       |
| 1      | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12 |       |
|        | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10       | 19,24.2    | 6,7   | 8,11  |
|        | 14,17                    |            |            |            |       |       |

TABLE 1

| <b>WebCode Amplification Kits (Probabilistic Genotyping Software)</b> |                                    |                |                 |                 |                   |                |
|---|------------------------------------|----------------|-----------------|-----------------|-------------------|----------------|
| <b>Item</b>   | <b>D1S1656</b>                     | <b>D2S1338</b> | <b>D2S441</b>   | <b>D3S1358</b>  | <b>D5S818</b>     | <b>D6S1043</b> |
|   | <b>D7S820</b>                      | <b>D8S1179</b> | <b>D10S1248</b> | <b>D12S391</b>  | <b>D13S317</b>    | <b>D16S539</b> |
|   | <b>D18S51</b>                      | <b>D19S433</b> | <b>D21S11</b>   | <b>D22S1045</b> | <b>Amelogenin</b> | <b>CSF1PO</b>  |
|   | <b>FGA</b>                         | <b>Penta D</b> | <b>Penta E</b>  | <b>SE33</b>     | <b>TH01</b>       | <b>TPOX</b>    |
|   | <b>vWA</b>                         | <b>DYS391</b>  | <b>DYS570</b>   | <b>DYS576</b>   | <b>Y Indel</b>    |                |
| <b>Item 1 - STR Results</b>   |                                    |                |                 |                 |                   |                |
| HFFBQD  | PowerPlex® Fusion                  |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                              | 9              | 5,10            |                 | 6,7               | 8,11           |
|   | 14,17                              | NR             |                 |                 |                   |                |
| HQFYQM  | Investigator® 24plex GO!           |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              |                |                 |                 |                   |                |
| HXCZM8  | PowerPlex® Fusion 6C, GlobalFiler™ |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | Not Detected   |                 |                 | Not Detected      |                |
| JXANJB  | Investigator® 24plex               |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | No Results     |                 |                 |                   |                |
| JXBH7N  | Investigator® 24plex GO!           |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              |                |                 |                 |                   |                |
| K8C9JH  | PowerPlex® Fusion 6C               |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              | 9,9            | 5,10            | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              |                |                 |                 |                   |                |
| K9KKWD  | GlobalFiler™ Express               |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | NM             |                 |                 | NM                |                |

TABLE 1

| WebCode | 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

|        |   |                                       |                                      |                                    |                              |                                     |
|--------|---|---------------------------------------|--------------------------------------|------------------------------------|------------------------------|-------------------------------------|
| KECM6K | PowerPlex® Fusion 6C                        |                                       |                                      |                                    |                              |                                     |
| 1      | 16,18.3<br>10,10<br>13,16<br>20,21<br>14,17 | 21,26<br>10,14<br>13,15<br>9,9        | 11,12<br>14,16<br>31,32.2<br>5,10    | 15,17<br>17,21<br>15,15<br>19,24.2 | 11,12<br>13,13<br>X,X<br>6,7 | 9,14<br>10,11<br>8,11               |
| KUM9NA | GlobalFiler™ Express                        |                                       |                                      |                                    |                              |                                     |
| 1      | 16,18.3<br>10<br>13,16<br>20,21<br>14,17    | 21,26<br>10,14<br>13,15<br>No Results | 11,12<br>14,16<br>31,32.2<br>19,24.2 | 15,17<br>17,21<br>15<br>19,24.2    | 11,12<br>13<br>X<br>6,7      | 9,14<br>10,11<br>8,11<br>No Results |
| KWTQQC | PowerPlex® Fusion 6C                        |                                       |                                      |                                    |                              |                                     |
| 1      | 16,18.3<br>10,10<br>13,16<br>20,21<br>14,17 | 21,26<br>10,14<br>13,15<br>9,9        | 11,12<br>14,16<br>31,32.2<br>5,10    | 15,17<br>17,21<br>15,15<br>19,24.2 | 11,12<br>13,13<br>X,X<br>6,7 | 9,14<br>10,11<br>8,11               |
| KWVGYF | GlobalFiler™                                |                                       |                                      |                                    |                              |                                     |
| 1      | 16,18.3<br>10<br>13,16<br>20,21<br>14,17    | 21,26<br>10,14<br>13,15<br>No Results | 11,12<br>14,16<br>31,32.2<br>19,24.2 | 15,17<br>17,21<br>15<br>19,24.2    | 11,12<br>13<br>X<br>6,7      | 9,14<br>10,11<br>8,11               |
| KY249D | Investigator® 24plex                        |                                       |                                      |                                    |                              |                                     |
| 1      | 16,18.3<br>10,10<br>13,16<br>20,21<br>14,17 | 21,26<br>10,14<br>13,15<br>No Results | 11,12<br>14,16<br>31,32.2<br>19,24.2 | 15,17<br>17,21<br>15,15<br>19,24.2 | 11,12<br>13,13<br>X,X<br>6,7 | 9,14<br>10,11<br>8,11               |
| L66AJA | PowerPlex® Fusion 5C, MiniFiler             |                                       |                                      |                                    |                              |                                     |
| 1      | 16,18.3<br>10,10<br>13,16<br>20,21<br>14,17 | 21,26<br>10,14<br>13,15<br>9,9        | 11,12<br>14,16<br>31,32.2<br>5,10    | 15,17<br>17,21<br>15,15<br>19,24.2 | 11,12<br>13,13<br>X,X<br>6,7 | 9,14<br>10,11<br>8,11               |
| LB8JP3 | GlobalFiler™                                |                                       |                                      |                                    |                              |                                     |
| 1      | 16,18.3<br>10<br>13,16<br>20,21<br>14,17    | 21,26<br>10,14<br>13,15<br>No Results | 11,12<br>14,16<br>31,32.2<br>19,24.2 | 15,17<br>17,21<br>15<br>19,24.2    | 11,12<br>13<br>X<br>6,7      | 9,14<br>10,11<br>8,11               |

TABLE 1

| WebCode | 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

|        |                          |       |         |         |       |       |
|--------|--------------------------|-------|---------|---------|-------|-------|
| LH89HM | PowerPlex® ESX17         |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   |       |       |
|        |                          | 10,14 | 14,16   | 17,21   |       | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15      | X     |       |
|        | 20,21                    |       |         | 19,24.2 | 6,7   |       |
|        | 14,17                    |       |         |         |       |       |
| LNY6XJ | PowerPlex® Fusion 6C     |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                    | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |       |         |         |       |       |
| LQ6LBG | PowerPlex® Fusion 6C     |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                    | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    | NR    | NR      | NR      |       |       |
| LQ6NZK | Investigator® 24plex GO! |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 | N/A   |
|        | 10                       | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    | N/A   | N/A     | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    | N/A   | N/A     | N/A     | N/A   |       |
| LTPF8G | PowerPlex® Fusion 6C     |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                    | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |       |         |         |       |       |
| LYYFPE | GlobalFiler™ Express     |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                    | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |       |         |         |       |       |
| M4NDTV | PowerPlex® Fusion 5C     |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                       | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    | 9     | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                    |       |         |         |       |       |

TABLE 1

| <b>WebCode Amplification Kits (Probabilistic Genotyping Software)</b> |                                    |                |                 |                 |                   |                |
|---|------------------------------------|----------------|-----------------|-----------------|-------------------|----------------|
| <b>Item</b>   | <b>D1S1656</b>                     | <b>D2S1338</b> | <b>D2S441</b>   | <b>D3S1358</b>  | <b>D5S818</b>     | <b>D6S1043</b> |
|   | <b>D7S820</b>                      | <b>D8S1179</b> | <b>D10S1248</b> | <b>D12S391</b>  | <b>D13S317</b>    | <b>D16S539</b> |
|   | <b>D18S51</b>                      | <b>D19S433</b> | <b>D21S11</b>   | <b>D22S1045</b> | <b>Amelogenin</b> | <b>CSF1PO</b>  |
|   | <b>FGA</b>                         | <b>Penta D</b> | <b>Penta E</b>  | <b>SE33</b>     | <b>TH01</b>       | <b>TPOX</b>    |
|   | <b>vWA</b>                         | <b>DYS391</b>  | <b>DYS570</b>   | <b>DYS576</b>   | <b>Y Indel</b>    |                |
| <b>Item 1 - STR Results</b>   |                                    |                |                 |                 |                   |                |
| M7VXEB  | Investigator® 24plex               |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | No Results     |                 |                 |                   |                |
| MBQFZG  | GlobalFiler™                       |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | No Results     |                 |                 |                   |                |
| MGCKNB  | PowerPlex® Fusion 6C               |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              | 9,9            | 5,10            | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | No Results     |                 |                 |                   |                |
| MHRUM4  | GlobalFiler™                       |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | No Results     |                 |                 |                   |                |
| MUF32W  | GlobalFiler™                       |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | No Results     |                 |                 |                   |                |
| MW4GQ7  | GlobalFiler™ Express               |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | No Results     |                 |                 |                   |                |
| NJD32X  | PowerPlex® Fusion 6C, GlobalFiler™ |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | Not Detected   |                 |                 |                   |                |
|   |                                    | Not Detected   |                 |                 |                   |                |

TABLE 1

| WebCode | 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

|        |                          |            |         |         |       |       |
|--------|--------------------------|------------|---------|---------|-------|-------|
| PCEV4A | PowerPlex® Fusion 6C     |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10,10                    | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    | ND         | ND      | ND      |       |       |
| PE2ATJ | Investigator® 24plex GO! |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                       | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |            |         |         |       |       |
| PEYP2A | PowerPlex® Fusion 5C     |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10,10                    | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9        | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                    | No Results |         |         |       |       |
| PK4GA8 | PowerPlex® ESX 16 Fast   |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   |       |       |
| 1      |                          | 10,14      | 14,16   | 17,21   |       | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15      | X     |       |
|        | 20,21                    |            |         |         | 6,7   |       |
|        | 14,17                    |            |         |         |       |       |
| Q4UYT8 | GlobalFiler™             |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10,10                    | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |            |         |         |       |       |
| Q67QRF | Investigator® 24plex GO! |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 | N/A   |
| 1      | 10                       | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    | N/A        | N/A     | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    | N/A        | N/A     | N/A     | N/A   |       |
| QA2KPG | GlobalFiler™ (STRmix)    |            |         |         |       |       |
|        | 16,18.3                  | 21,26      | 11,12   | 15,17   | 11,12 |       |
| 1      | 10                       | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |            |         |         |       |       |

TABLE 1

| WebCode 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   |                          |            |            |            |            |         |
| QA2Z6H   | GlobalFiler™             |            |            |            |            |         |
| 1  | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12      |         |
|  | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13      | 9,14    |
|  | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X        | 10,11   |
|  | 20,21                    |            |            | 19,24.2    | 6,7        | 8,11    |
|  | 14,17                    | NR         |            |            | NR         |         |
| QBZX9  | PowerPlex® Fusion 6C     |            |            |            |            |         |
| 1  | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12      |         |
|  | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13      | 9,14    |
|  | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X        | 10,11   |
|  | 20,21                    | 9,9        | 5,10       | 19,24.2    | 6,7        | 8,11    |
|  | 14,17                    | No Results | No Results | No Results |            |         |
| QVJWAR   | PowerPlex® Fusion 5C     |            |            |            |            |         |
| 1  | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12      |         |
|  | 10                       | 10,14      | 14,16      | 17,21      | 13         | 9,14    |
|  | 13,16                    | 13,15      | 31,32.2    | 15         | X,X        | 10,11   |
|  | 20,21                    | 9          | 5,10       |            | 6,7        | 8,11    |
|  | 14,17                    |            |            |            |            |         |
| QWR3T8   | PowerPlex® Fusion 6C     |            |            |            |            |         |
| 1  | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12      |         |
|  | 10                       | 10,14      | 14,16      | 17,21      | 13         | 9,14    |
|  | 13,16                    | 13,15      | 31,32.2    | 15         | X          | 10,11   |
|  | 20,21                    | 9          | 5,10       | 19,24.2    | 6,7        | 8,11    |
|  | 14,17                    |            |            |            |            |         |
| QWX28Q   | GlobalFiler™             |            |            |            |            |         |
| 1  | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12      |         |
|  | 10                       | 10,14      | 14,16      | 17,21      | 13         | 9,14    |
|  | 13,16                    | 13,15      | 31,32.2    | 15         | X          | 10,11   |
|  | 20,21                    |            |            | 19,24.2    | 6,7        | 8,11    |
|  | 14,17                    |            |            |            |            |         |
| QZELU7   | PowerPlex® Fusion 6C     |            |            |            |            |         |
| 1  | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12      |         |
|  | 10,10                    | 10,14      | 14,16      | 17,21      | 13,13      | 9,14    |
|  | 13,16                    | 13,15      | 31,32.2    | 15,15      | X,X        | 10,11   |
|  | 20,21                    | 9,9        | 5,10       | 19,24.2    | 6,7        | 8,11    |
|  | 14,17                    |            |            |            |            |         |
| QZFGGH   | Investigator® 24plex GO! |            |            |            |            |         |
| 1  | 16,18.3                  | 21,26      | 11,12      | 15,17      | 11,12      |         |
|  | 10                       | 10,14      | 14,16      | 17,21      | 13         | 9,14    |
|  | 13,16                    | 13,15      | 31,32.2    | 15         | X          | 10,11   |
|  | 20,21                    |            |            | 19,24.2    | 6,7        | 8,11    |
|  | 14,17                    |            |            |            |            |         |

TABLE 1

| <b>WebCode Amplification Kits (Probabilistic Genotyping Software)</b> |                                    |                |                 |                 |                   |                |
|---|------------------------------------|----------------|-----------------|-----------------|-------------------|----------------|
| <b>Item</b>   | <b>D1S1656</b>                     | <b>D2S1338</b> | <b>D2S441</b>   | <b>D3S1358</b>  | <b>D5S818</b>     | <b>D6S1043</b> |
|   | <b>D7S820</b>                      | <b>D8S1179</b> | <b>D10S1248</b> | <b>D12S391</b>  | <b>D13S317</b>    | <b>D16S539</b> |
|   | <b>D18S51</b>                      | <b>D19S433</b> | <b>D21S11</b>   | <b>D22S1045</b> | <b>Amelogenin</b> | <b>CSF1PO</b>  |
|   | <b>FGA</b>                         | <b>Penta D</b> | <b>Penta E</b>  | <b>SE33</b>     | <b>TH01</b>       | <b>TPOX</b>    |
|   | <b>vWA</b>                         | <b>DYS391</b>  | <b>DYS570</b>   | <b>DYS576</b>   | <b>Y Indel</b>    |                |
| <b>Item 1 - STR Results</b>   |                                    |                |                 |                 |                   |                |
| R4PY8X  | PowerPlex® Fusion 6C, GlobalFiler™ |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | Not Detected   |                 |                 | Not Detected      |                |
| R8UK4B  | PowerPlex® Fusion                  |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              | 9,9            | 5,10            |                 | 6,7               | 8,11           |
|   | 14,17                              | NR             |                 |                 |                   |                |
| REB3J4  | PowerPlex® Fusion 6C               |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              | 9,9            | 5,10            | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              |                |                 |                 |                   |                |
| RHBA3F  | Investigator® 24plex GO!           |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              |                |                 |                 |                   |                |
| RNBZYQ  | GlobalFiler™ (STRmix)              |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              |                |                 |                 |                   |                |
| RNCTWY  | PowerPlex® Fusion                  |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                                 | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                              | 9              | 5,10            |                 | 6,7               | 8,11           |
|   | 14,17                              | NR             |                 |                 |                   |                |
| RNYYGX  | PowerPlex® Fusion 6C, GlobalFiler™ |                |                 |                 |                   |                |
|   | 16,18.3                            | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                              | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                              | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                              |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                              | Not Detected   |                 | Not Detected    |                   |                |

TABLE 1

| WebCode | 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

|        |                          |       |         |         |       |       |
|--------|--------------------------|-------|---------|---------|-------|-------|
| RPBNQ3 | PowerPlex® Fusion 6C     |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                    | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    | NR    | NR      | NR      |       |       |
| RX4YXC | PowerPlex® Fusion        |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                    | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9   | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                    | ND    |         |         |       |       |
| T8BX8E | GlobalFiler™             |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                    | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    | --    |         |         | --    |       |
| TAFQ2C | Investigator® 24plex GO! |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                       | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |       |         |         |       |       |
| TFG3XA | PowerPlex® Fusion 6C     |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                    | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    | NR    | NR      | NR      |       |       |
| TGVC34 | PowerPlex® Fusion 6C     |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                    | 10,14 | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                    | 9,9   | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |       |         |         |       |       |
| TLNE9N | GlobalFiler™             |       |         |         |       |       |
| 1      | 16,18.3                  | 21,26 | 11,12   | 15,17   | 11,12 |       |
|        | 10                       | 10,14 | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                    | 13,15 | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                    |       |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                    |       |         |         |       |       |

TABLE 1

| WebCode | 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

|        |                               |            |            |            |            |       |
|--------|-------------------------------|------------|------------|------------|------------|-------|
| TXJHHA | PowerPlex® Fusion             |            |            |            |            |       |
| 1      | 16,18.3                       | 21,26      | 11,12      | 15,17      | 11,12      |       |
|        | 10,10                         | 10,14      | 14,16      | 17,21      | 13,13      | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2    | 15,15      | X,X        | 10,11 |
|        | 20,21                         | 9,9        | 5,10       |            | 6,7        | 8,11  |
|        | 14,17                         | NR         |            |            |            |       |
| TXY238 | PowerPlex® Fusion 6C          |            |            |            |            |       |
| 1      | 16,18.3                       | 21,26      | 11,12      | 15,17      | 11,12      |       |
|        | 10,10                         | 10,14      | 14,16      | 17,21      | 13,13      | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2    | 15,15      | X,X        | 10,11 |
|        | 20,21                         | 9,9        | 5,10       | 19,24.2    | 6,7        | 8,11  |
|        | 14,17                         | No Results | No Results | No Results |            |       |
| U3C4P3 | PowerPlex® 21                 |            |            |            |            |       |
| 1      | 16,18.3                       | 21,26      |            | 15,17      | 11,12      | 11,12 |
|        | 10,10                         | 10,14      |            | 17,21      | 13,13      | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2    |            | X,X        | 10,11 |
|        | 20,21                         | 9,9        | 5,10       |            | 6,7        | 8,11  |
|        | 14,17                         |            |            |            |            |       |
| U6D6PZ | PowerPlex® Fusion 6C          |            |            |            |            |       |
| 1      | 16,18.3                       | 21,26      | 11,12      | 15,17      | 11,12      |       |
|        | 10,10                         | 10,14      | 14,16      | 17,21      | 13,13      | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2    | 15,15      | X,X        | 10,11 |
|        | 20,21                         | 9,9        | 5,10       | 19,24.2    | 6,7        | 8,11  |
|        | 14,17                         | NR         | NR         | NR         |            |       |
| UXDWYY | GlobalFiler™ Express (STRmix) |            |            |            |            |       |
| 1      | 16,18.3                       | 21,26      | 11,12      | 15,17      | 11,12      |       |
|        | 10                            | 10,14      | 14,16      | 17,21      | 13         | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2    | 15         | X          | 10,11 |
|        | 20,21                         |            |            | 19,24.2    | 6,7        | 8,11  |
|        | 14,17                         | No Results |            |            | No Results |       |
| UYCTT3 | Identifier® Plus              |            |            |            |            |       |
| 1      |                               | 21,26      |            | 15,17      | 11,12      |       |
|        | 10,10                         | 10,14      |            |            | 13,13      | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2    |            | X,X        | 10,11 |
|        | 20,21                         |            |            |            | 6,7        | 8,11  |
|        | 14,17                         |            |            |            |            |       |
| VHXLXC | NGM SElect                    |            |            |            |            |       |
| 1      | 16,18.3                       | 21,26      | 11,12      | 15,17      |            |       |
|        |                               | 10,14      | 14,16      | 17,21      |            | 9,14  |
|        | 13,16                         | 13,15      | 31,32.2    | 15,15      | X,X        |       |
|        | 20,21                         |            |            | 19,24.2    | 6,7        |       |
|        | 14,17                         |            |            |            |            |       |

TABLE 1

| WebCode | 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**

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| VLJTE7 | GlobalFiler™ |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10 | 10,14 | 14,16 | 17,21 | 13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15 | X | 10,11 |
|  | 20,21 |  |  | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| VTZA49 | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| W7K9A2 | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 | No Results | No Results | No Results |  |  |
| WHRQRC | PowerPlex® ESI17 |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 |  |  |
| 1 |  | 10,14 | 14,16 | 17,21 |  | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15 | X |  |
|  | 20,21 |  |  | 19,24.2 | 6,7 |  |
|  | 14,17 |  |  |  |  |  |
| WR3HAZ | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| WWE77P | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| X3DFN3 | Identifier® Direct |  |  |  |  |  |
|  |  | 21,26 |  | 15,17 | 11,12 |  |
| 1 | 10 | 10,14 |  |  | 13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 |  | X,X | 10,11 |
|  | 20,21 |  |  |  | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |

TABLE 1

| <b>WebCode Amplification Kits (Probabilistic Genotyping Software)</b> |                          |                |                 |                 |                   |                |
|---|--------------------------|----------------|-----------------|-----------------|-------------------|----------------|
| <b>Item</b>   | <b>D1S1656</b>           | <b>D2S1338</b> | <b>D2S441</b>   | <b>D3S1358</b>  | <b>D5S818</b>     | <b>D6S1043</b> |
|   | <b>D7S820</b>            | <b>D8S1179</b> | <b>D10S1248</b> | <b>D12S391</b>  | <b>D13S317</b>    | <b>D16S539</b> |
|   | <b>D18S51</b>            | <b>D19S433</b> | <b>D21S11</b>   | <b>D22S1045</b> | <b>Amelogenin</b> | <b>CSF1PO</b>  |
|   | <b>FGA</b>               | <b>Penta D</b> | <b>Penta E</b>  | <b>SE33</b>     | <b>TH01</b>       | <b>TPOX</b>    |
|   | <b>vWA</b>               | <b>DYS391</b>  | <b>DYS570</b>   | <b>DYS576</b>   | <b>Y Indel</b>    |                |
| <b>Item 1 - STR Results</b>   |                          |                |                 |                 |                   |                |
| X8AW99  | GlobalFiler™             |                |                 |                 |                   |                |
|   | 16,18.3                  | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                    | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                    | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                    |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                    | --             |                 |                 | --                |                |
| XC8DL3  | PowerPlex® Fusion 6C     |                |                 |                 |                   |                |
|   | 16,18.3                  | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10,10                    | 10,14          | 14,16           | 17,21           | 13,13             | 9,14           |
|   | 13,16                    | 13,15          | 31,32.2         | 15,15           | X,X               | 10,11          |
|   | 20,21                    | 9,9            | 5,10            | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                    | No Results     | No Results      | No Results      |                   |                |
| XCNGA3  | Identifier® Direct       |                |                 |                 |                   |                |
|   |                          | 21,26          |                 | 15,17           | 11,12             |                |
| 1   | 10                       | 10,14          |                 |                 | 13                | 9,14           |
|   | 13,16                    | 13,15          | 31,32.2         |                 | X,X               | 10,11          |
|   | 20,21                    |                |                 |                 | 6,7               | 8,11           |
|   | 14,17                    |                |                 |                 |                   |                |
| XDYG9H  | PowerPlex® Fusion 5C     |                |                 |                 |                   |                |
|   | 16,18.3                  | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                       | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                    | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                    | 9              | 5,10            |                 | 6,7               | 8,11           |
|   | 14,17                    |                |                 |                 |                   |                |
| XG38J4  | GlobalFiler™ (STRmix)    |                |                 |                 |                   |                |
|   | 16,18.3                  | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                       | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                    | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                    |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                    |                |                 |                 |                   |                |
| XGXR4H  | GlobalFiler™             |                |                 |                 |                   |                |
|   | 16,18.3                  | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                       | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                    | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                    |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                    |                |                 |                 |                   |                |
| XHCCU8  | Investigator® 24plex GO! |                |                 |                 |                   |                |
|   | 16,18.3                  | 21,26          | 11,12           | 15,17           | 11,12             |                |
| 1   | 10                       | 10,14          | 14,16           | 17,21           | 13                | 9,14           |
|   | 13,16                    | 13,15          | 31,32.2         | 15              | X                 | 10,11          |
|   | 20,21                    |                |                 | 19,24.2         | 6,7               | 8,11           |
|   | 14,17                    |                |                 |                 |                   |                |

TABLE 1

| WebCode | 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

|        |                       |            |         |         |       |       |
|--------|-----------------------|------------|---------|---------|-------|-------|
| XNHTKV | PowerPlex® Fusion     |            |         |         |       |       |
| 1      | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10                    | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                 | 9          | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                 | NR         |         |         |       |       |
| XPRVAZ | Investigator® 24plex  |            |         |         |       |       |
| 1      | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                 | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                 |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 | No Results |         |         |       |       |
| XRWJUW | PowerPlex® Fusion 6C  |            |         |         |       |       |
| 1      | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                 | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15      | X,X   | 10,11 |
|        | 20,21                 | 9,9        | 5,10    | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 | NR         | NR      | NR      |       |       |
| XU7FEZ | Investigator® 24plex  |            |         |         |       |       |
| 1      | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                 | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                 |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 | No Results |         |         |       |       |
| YCZL8R | GlobalFiler™          |            |         |         |       |       |
| 1      | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10,10                 | 10,14      | 14,16   | 17,21   | 13,13 | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15,15   | X,X   | 10,11 |
|        | 20,21                 |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 |            |         |         |       |       |
| YRVV3K | GlobalFiler™ (STRmix) |            |         |         |       |       |
| 1      | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10                    | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                 |            |         | 19,24.2 | 6,7   | 8,11  |
|        | 14,17                 |            |         |         |       |       |
| YRXMZR | PowerPlex® Fusion     |            |         |         |       |       |
| 1      | 16,18.3               | 21,26      | 11,12   | 15,17   | 11,12 |       |
|        | 10                    | 10,14      | 14,16   | 17,21   | 13    | 9,14  |
|        | 13,16                 | 13,15      | 31,32.2 | 15      | X     | 10,11 |
|        | 20,21                 | 9          | 5,10    |         | 6,7   | 8,11  |
|        | 14,17                 | NR         |         |         |       |       |

TABLE 1

| WebCode | 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**

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| ZARTPX | PowerPlex® Fusion 6C | | | | | |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10 | 10,14 | 14,16 | 17,21 | 13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15 | X | 10,11 |
|  | 20,21 | 9 | 5,10 | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| ZAUM94 | PowerPlex® Fusion | | | | | |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 |  | 6,7 | 8,11 |
|  | 14,17 | NR |  |  |  |  |
| ZEH8BY | PowerPlex® Fusion 5C | | | | | |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 | Not Tested |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 | Not Tested | 6,7 | 8,11 |
|  | 14,17 | No results | Not Tested | Not Tested | Not Tested |  |
| ZKAHKW | GlobalFiler™ (TrueAllele) | | | | | |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10 | 10,14 | 14,16 | 17,21 | 13 | 9,14 |
|  | 13,16 | 13,15 | 31,31.2 | 15 | X | 10,11 |
|  | 20,21 |  |  | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| ZWHZEL | GlobalFiler™ | | | | | |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10 | 10,14 | 14,16 | 17,21 | 13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15 | X,X | 10,11 |
|  | 20,21 |  |  | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| ZYA44L | PowerPlex® Fusion 6C | | | | | |
|  | 16,18.3 | 21,26 | 11,12 | 15,17 | 11,12 |  |
| 1 | 10,10 | 10,14 | 14,16 | 17,21 | 13,13 | 9,14 |
|  | 13,16 | 13,15 | 31,32.2 | 15,15 | X,X | 10,11 |
|  | 20,21 | 9,9 | 5,10 | 19,24.2 | 6,7 | 8,11 |
|  | 14,17 |  |  |  |  |  |

TABLE 1

| WebCode | 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

|        |                                    |         |       |           |       |       |
|--------|------------------------------------|---------|-------|-----------|-------|-------|
| 2JRNH2 | PowerPlex® Fusion 6C               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |
| 2TUB6R | GlobalFiler™ Express               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           | 2     |       |
| 2VNYNN | PowerPlex® Fusion 6C, GlobalFiler™ |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           | 2     |       |
| 38ZG4X | PowerPlex® Fusion 6C               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |
| 3BW84H | GlobalFiler™                       |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           | 2     |       |
| 3C4MEU | GlobalFiler™ Express               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           | 2     |       |
| 3DZ6CP | GlobalFiler™                       |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           | 2     |       |

TABLE 1

| WebCode | 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

|        |                       |         |       |           |       |       |
|--------|-----------------------|---------|-------|-----------|-------|-------|
| 3NYTCY | GlobalFiler™ (STRmix) |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| 3PGKN4 | GlobalFiler™          |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |           | 2     |       |
| 44TKTT | GlobalFiler™ Express  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |           | 2     |       |
| 4EQNTG | GlobalFiler™          |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| 4GD3HQ | PowerPlex® Fusion     |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           |       |       |
| 4NEG6D | GlobalFiler™          |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| 4X46XU | GlobalFiler™ Express  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |

TABLE 1

| WebCode | 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

|        |                       |         |       |           |       |       |
|--------|-----------------------|---------|-------|-----------|-------|-------|
| 4YWYXK | GlobalFiler™          |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| 66H4ER | PowerPlex® Fusion 6C  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                 | 11      | 17    | 19        |       |       |
| 66J9KM | GlobalFiler™          |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| 69HFAR | PowerPlex® Fusion 6C  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                 | 11      | 17    | 19        |       |       |
| 69HJGM | GlobalFiler™          |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| 6JJRHE | GlobalFiler™ (STRmix) |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| 6K9DTG | GlobalFiler™ Express  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |

TABLE 1

| WebCode | 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

|        |                      |         |       |           |       |       |
|--------|----------------------|---------|-------|-----------|-------|-------|
| 6YP97R | Investigator® 24plex |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      |       |           |       |       |
| 7A93XE | PowerPlex® Fusion 6C |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      | 17    | 19        |       |       |
| 7HHCMT | GlobalFiler™ Express |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      |       |           | 2     |       |
| 7HYN3D | GlobalFiler™         |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 | --    |
| 2      | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                | --      | --    | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      | --    | --        | 2     |       |
| 7KLAUF | PowerPlex® Fusion 6C |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      | 17    | 19        |       |       |
| 7KM3RM | GlobalFiler™ Express |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      |       |           | 2     |       |
| 7NUB3T | PowerPlex® Fusion 6C |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      | 17    | 19        |       |       |

TABLE 1

| WebCode | 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

|        |                          |         |       |       |       |       |
|--------|--------------------------|---------|-------|-------|-------|-------|
| 7QE6YT | PowerPlex® 5C            |         |       |       |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18 | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21 | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16 | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |       | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |       |       |       |
| 7QHPR3 | Investigator® 24plex GO! |         |       |       |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18 | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21 | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16 | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2  | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |       |       |       |
| 7QVJ83 | Investigator® 24plex GO! |         |       |       |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18 | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21 | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16 | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2  | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |       |       |       |
| 7RQ4RG | GlobalFiler™             |         |       |       |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18 | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21 | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16 | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2  | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |       | 2     |       |
| 7RRYFT | PowerPlex® 5C            |         |       |       |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18 | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21 | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16 | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |       | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |       |       |       |
| 7VRGN3 | GlobalFiler™             |         |       |       |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18 | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21 | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16 | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2  | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |       | 2     |       |
| 842QMZ | Investigator® 24plex GO! |         |       |       |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18 | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21 | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16 | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2  | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |       |       |       |

TABLE 1

| WebCode | 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

|        |                      |         |       |           |       |       |
|--------|----------------------|---------|-------|-----------|-------|-------|
| 8CTDAP | Investigator® 24plex |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      |       |           |       |       |
| 8DQFJN | PowerPlex® Fusion 6C |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      | 17    | 19        |       |       |
| 8HF27G | GlobalFiler™         |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      |       |           | 2     |       |
| 8KJYFN | PowerPlex® Fusion 5C |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                | 11      |       |           |       |       |
| 96QUX2 | Identifier® Plus     |         |       |           |       |       |
|        |                      | 17,24   |       | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13,13   |       |           | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 |           | X,Y   | 11,12 |
|        | 20,22                |         |       |           | 9,9.3 | 8,8   |
|        | 14,17                |         |       |           |       |       |
| 97JFFC | GlobalFiler™         |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      |       |           | 2     |       |
| 9DG8LK | GlobalFiler™ Express |         |       |           |       |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                 | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      |       |           | 2     |       |

TABLE 1

| WebCode | 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

|        |                          |         |       |           |       |       |
|--------|--------------------------|---------|-------|-----------|-------|-------|
| 9K227W | Investigator® 24plex GO! |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 | N/A   |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | N/A     | N/A   | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      | N/A   | N/A       | N/A   |       |
| 9LAHWF | GlobalFiler™             |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           | 2     |       |
| 9NXWKP | Identifier® Direct       |         |       |           |       |       |
|        |                          | 17,24   |       | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      |       |           | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    |           | X,Y   | 11,12 |
|        | 20,22                    |         |       |           | 9,9.3 | 8     |
|        | 14,17                    |         |       |           |       |       |
| 9PWWNV | PowerPlex® Fusion 6C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| 9QAJ6P | PowerPlex® Fusion 6C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| 9U79LW | Investigator® 24plex GO! |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |
| 9V3NTM | PowerPlex® Fusion 6C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |

TABLE 1

| WebCode | 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

|        |                       |         |       |           |       |       |
|--------|-----------------------|---------|-------|-----------|-------|-------|
| 9ZEG6L | GlobalFiler™ Express  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| A3GYH8 | PowerPlex® Fusion 5C  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           |       |       |
| A6LKEK | PowerPlex® Fusion 6C  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                 | 11      | 17    | 19        |       |       |
| A86L98 | PowerPlex® Fusion 6C  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      | 17    | 19        |       |       |
| A9Z4B9 | GlobalFiler™ (STRmix) |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| ADY9CT | PowerPlex® Fusion     |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |           |       |       |
| AF3DJL | PowerPlex® Fusion     |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |           |       |       |

TABLE 1

| WebCode | 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

|        |                          |         |       |           |       |       |
|--------|--------------------------|---------|-------|-----------|-------|-------|
| AGXWKM | PowerPlex® Fusion 5C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |           |       |       |
| AJ2MUN | PowerPlex® Fusion 6C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| APBNBL | PowerPlex® Fusion        |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |
| ATNQTB | PowerPlex® Fusion 6C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| AZB8WL | PowerPlex® Fusion 6C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| B63VQY | Investigator® 24plex GO! |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |
| B6LNKG | PowerPlex® Fusion        |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |

TABLE 1

| WebCode | 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

|        |                            |         |       |           |       |       |
|--------|----------------------------|---------|-------|-----------|-------|-------|
| B6Y9DQ | GlobalFiler™ (STRmix v2.7) |         |       |           |       |       |
|        | 14,16.3                    | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                       | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                      | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                      |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                      | 11      |       |           | 2     |       |
| B6ZBXP | Investigator® 24plex       |         |       |           |       |       |
|        | 14,16.3                    | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                       | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                      | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                      |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                      | 11      |       |           |       |       |
| BB6A8T | PowerPlex® Fusion 6C       |         |       |           |       |       |
|        | 14,16.3                    | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                       | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                      | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                      | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                      | 11      | 17    | 19        |       |       |
| BJYCFW | Investigator® 24plex GO!   |         |       |           |       |       |
|        | 14,16.3                    | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                       | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                      | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                      |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                      | 11      |       |           |       |       |
| BVBMYF | PowerPlex® Fusion          |         |       |           |       |       |
|        | 14,16.3                    | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                       | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                      | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                      | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                      | 11      |       |           |       |       |
| BWBHTK | PowerPlex® Fusion 6C       |         |       |           |       |       |
|        | 14,16.3                    | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                       | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                      | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                      | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                      | 11      | 17    | 19        |       |       |
| BYBTHR | PowerPlex® Fusion 6C       |         |       |           |       |       |
|        | 14,16.3                    | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                       | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                      | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                      | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                      | 11      | 17    | 19        |       |       |

TABLE 1

| WebCode | 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

|        |                                     |         |       |           |       |       |
|--------|-------------------------------------|---------|-------|-----------|-------|-------|
| BYUJM7 | PowerPlex® Fusion 6C (STRmix 2.6.3) |         |       |           |       |       |
|        | 14,16.3                             | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                                | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                               | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                               | 12,14   | 10,14 | 29.2      | 9,9.3 | 8     |
|        | 14,17                               | 11      | 17    | 19        |       |       |
| C3NZD6 | PowerPlex® Fusion 6C                |         |       |           |       |       |
|        | 14,16.3                             | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                                | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                               | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                               | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                               | 11      | 17    | 19        |       |       |
| C4JHE7 | GlobalFiler™ (STRmix)               |         |       |           |       |       |
|        | 14,16.3                             | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                                | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                               | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                               |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                               | 11      |       |           | 2     |       |
| CYRCXJ | Investigator® 24plex                |         |       |           |       |       |
|        | 14,16.3                             | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                                | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                               | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                               |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                               | 11      |       |           |       |       |
| D8JYDL | GlobalFiler™ (STRmix)               |         |       |           |       |       |
|        | 14,16.3                             | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                                | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                               | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                               |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                               | 11      |       |           | 2     |       |
| DHVD89 | PowerPlex® Fusion 6C                |         |       |           |       |       |
|        | 14,16.3                             | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                                | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                               | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                               | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                               | 11      | 17    | 19        |       |       |
| DK4N4C | PowerPlex® Fusion 6C, GlobalFiler™  |         |       |           |       |       |
|        | 14,16.3                             | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                                | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                               | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                               |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                               | 11      |       |           | 2     |       |

TABLE 1

| WebCode | 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

|        |                       |         |       |            |       |       |
|--------|-----------------------|---------|-------|------------|-------|-------|
| EHT7HK | Identifiler® Direct   |         |       |            |       |       |
|        |                       | 17,24   |       | 16,18      | 11,12 |       |
| 2      | 9,11                  | 13      |       |            | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    |            | X,Y   | 11,12 |
|        | 20,22                 |         |       |            | 9,9.3 | 8     |
|        | 14,17                 |         |       |            |       |       |
| EM9GT4 | GlobalFiler™ (STRmix) |         |       |            |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18      | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21      | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16      | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2       | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |            | 2     |       |
| EPD3PG | PowerPlex® 5C         |         |       |            |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18      | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21      | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16      | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | Not Tested | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |            |       |       |
| EQQN4P | PowerPlex® Fusion     |         |       |            |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18      | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21      | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16      | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 |            | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |            |       |       |
| EU74PA | GlobalFiler™          |         |       |            |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18      | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21      | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16      | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2       | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |            | 2     |       |
| EVH3JJ | GlobalFiler™ Express  |         |       |            |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18      | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21      | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16      | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2       | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |            | 2     |       |
| EWDLKK | PowerPlex® Fusion 5C  |         |       |            |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18      | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21      | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16      | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 |            | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |            |       |       |

TABLE 1

| WebCode | 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

|        |                                    |         |       |           |       |       |
|--------|------------------------------------|---------|-------|-----------|-------|-------|
| EWUHDK | GlobalFiler™                       |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           | 2     |       |
| F3X4G8 | GlobalFiler™ IQC                   |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           | 2     |       |
| FB9639 | PowerPlex® Fusion 6C, GlobalFiler™ |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      | 17    | 19        | 2     |       |
| FCJ62N | PowerPlex® Fusion 6C               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |
| FFHGWN | PowerPlex® Fusion 6C               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |
| FMJTWQ | Investigator® 24plex GO!           |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           |       |       |
| FQLUXN | PowerPlex® Fusion                  |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           |       |       |

TABLE 1

| WebCode | 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

|        |                               |         |       |           |       |       |
|--------|-------------------------------|---------|-------|-----------|-------|-------|
| G7B4CD | PowerPlex® Fusion             |         |       |           |       |       |
| 2      | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           |       |       |
| G8BY6H | PowerPlex® Fusion 6C (STRmix) |         |       |           |       |       |
| 2      | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                         | 11      | 17    | 19        |       |       |
| GHP2H3 | PowerPlex® Fusion 5C          |         |       |           |       |       |
| 2      | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           |       |       |
| GJZ8F4 | PowerPlex® Fusion 6C          |         |       |           |       |       |
| 2      | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                         | 11      | 17    | 19        |       |       |
| GQXUBA | PowerPlex® Fusion             |         |       |           |       |       |
| 2      | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           |       |       |
| GRRJT6 | PowerPlex® Fusion 5C          |         |       |           |       |       |
| 2      | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           |       |       |
| GUGRYZ | GlobalFiler™ (STRmix)         |         |       |           |       |       |
| 2      | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           | 2     |       |

TABLE 1

| WebCode | 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

|        |                          |         |       |           |       |       |
|--------|--------------------------|---------|-------|-----------|-------|-------|
| GWRMRJ | PowerPlex® 6C            |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| GXLBAE | PowerPlex® Fusion 6C     |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| GZQ2CN | Investigator® 24plex GO! |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |
| H42DQF | PowerPlex® Fusion 6C     |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| H4LAWN | GlobalFiler™             |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |           | 2     |       |
| HBKL7Z | PowerPlex® Fusion 6C     |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| HFFBQD | PowerPlex® Fusion        |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |

TABLE 1

| WebCode | 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

|        |                                    |         |       |           |       |       |
|--------|------------------------------------|---------|-------|-----------|-------|-------|
| HQFYQM | Investigator® 24plex GO!           |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           |       |       |
| HXCZM8 | PowerPlex® Fusion 6C, GlobalFiler™ |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           | 2     |       |
| JXANJB | Investigator® 24plex               |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           |       |       |
| JXBH7N | Investigator® 24plex GO!           |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           |       |       |
| K8C9JH | PowerPlex® Fusion 6C               |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |
| K9KKWD | GlobalFiler™ Express               |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           | 2     |       |
| KECM6K | PowerPlex® Fusion 6C               |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |

TABLE 1

| WebCode | 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

|        |                      |         |       |           |       |       |
|--------|----------------------|---------|-------|-----------|-------|-------|
| KUM9NA | GlobalFiler™ Express |         |       |           |       |       |
| 2      | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                 | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      |       |           | 2     |       |
| KWTQQC | PowerPlex® Fusion 6C |         |       |           |       |       |
| 2      | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      | 17    | 19        |       |       |
| KWVGYF | GlobalFiler™         |         |       |           |       |       |
| 2      | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                 | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      |       |           | 2     |       |
| KY249D | Investigator® 24plex |         |       |           |       |       |
| 2      | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      |       |           |       |       |
| L66AJA | PowerPlex® Fusion 5  |         |       |           |       |       |
| 2      | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                | 11      |       |           |       |       |
| LB8JP3 | GlobalFiler™         |         |       |           |       |       |
| 2      | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                 | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      |       |           | 2     |       |
| LH89HM | PowerPlex® ESX17     |         |       |           |       |       |
| 2      | 14,16.3              | 17,24   | 11,14 | 16,18     |       |       |
|        |                      | 13      | 13,14 | 18,21     |       | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y   |       |
|        | 20,22                |         |       | 29.2      | 9,9.3 |       |
|        | 14,17                |         |       |           |       |       |

TABLE 1

| WebCode | 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

|        |  |   |   |   |                                       |                                       |
|--------|--|---|---|---|---------------------------------------|---------------------------------------|
| LNY6XJ | PowerPlex® Fusion 6C                       |   |   |   |                                       |                                       |
| 2      | 14,16.3<br>9,11<br>16,17<br>20,22<br>14,17 | 17,24<br>13,13<br>15,16.2<br>12,14<br>11  | 11,14<br>13,14<br>30,30<br>10,14<br>17      | 16,18<br>18,21<br>15,16<br>29.2,29.2<br>19  | 11,12<br>11,14<br>X,Y<br>9,9.3<br>8,8 | 11,12<br>11,12<br>11,12<br>8,8        |
| LQ6LBG | PowerPlex® Fusion 6C                       |   |   |   |                                       |                                       |
| 2      | 14,16.3<br>9,11<br>16,17<br>20,22<br>14,17 | 17,24<br>13,13<br>15,16.2<br>12,14<br>11  | 11,14<br>13,14<br>30,30<br>10,14<br>17      | 16,18<br>18,21<br>15,16<br>29.2,29.2<br>19  | 11,12<br>11,14<br>X,Y<br>9,9.3<br>8,8 | 11,12<br>11,12<br>11,12<br>8,8        |
| LQ6NZK | Investigator® 24plex GO!                   |   |   |   |                                       |                                       |
| 2      | 14,16.3<br>9,11<br>16,17<br>20,22<br>14,17 | 17,24<br>13<br>15,16.2<br>N/A<br>11       | 11,14<br>13,14<br>30<br>N/A<br>N/A          | 16,18<br>18,21<br>15,16<br>29.2<br>N/A      | 11,12<br>11,14<br>X,Y<br>9,9.3<br>N/A | N/A<br>11,12<br>11,12<br>8<br>N/A     |
| LTPF8G | PowerPlex® Fusion 6C                       |   |   |   |                                       |                                       |
| 2      | 14,16.3<br>9,11<br>16,17<br>20,22<br>14,17 | 17,24<br>13,13<br>15,16.2<br>12,14<br>11  | 11,14<br>13,14<br>30,30<br>10,14<br>17      | 16,18<br>18,21<br>15,16<br>29.2,29.2<br>19  | 11,12<br>11,14<br>X,Y<br>9,9.3<br>8,8 | 11,12<br>11,12<br>11,12<br>8,8        |
| LYYFPE | GlobalFiler™ Express                       |   |   |   |                                       |                                       |
| 2      | 14,16.3<br>9,11<br>16,17<br>20,22<br>14,17 | 17,24<br>13,13<br>15,16.2<br>N/A<br>11,11 | 11,14<br>13,14<br>30,30<br>29.2,29.2<br>N/A | 16,18<br>18,21<br>15,16<br>29.2,29.2<br>2   | 11,12<br>11,14<br>X,Y<br>9,9.3<br>2   | 11,12<br>11,12<br>11,12<br>8,8        |
| M4NDTV | PowerPlex® Fusion 5C                       |   |   |   |                                       |                                       |
| 2      | 14,16.3<br>9,11<br>16,17<br>20,22<br>14,17 | 17,24<br>13<br>15,16.2<br>12,14<br>11     | 11,14<br>13,14<br>30<br>10,14<br>N/A        | 16,18<br>18,21<br>15,16<br>9,9.3<br>N/A     | 11,12<br>11,14<br>X,Y<br>8<br>N/A     | 11,12<br>11,12<br>11,12<br>8<br>N/A   |
| M7VXEB | Investigator® 24plex                       |   |   |   |                                       |                                       |
| 2      | 14,16.3<br>9,11<br>16,17<br>20,22<br>14,17 | 17,24<br>13,13<br>15,16.2<br>N/A<br>11    | 11,14<br>13,14<br>30,30<br>29.2,29.2<br>N/A | 16,18<br>18,21<br>15,16<br>29.2,29.2<br>N/A | 11,12<br>11,14<br>X,Y<br>9,9.3<br>N/A | 11,12<br>11,12<br>11,12<br>8,8<br>N/A |

TABLE 1

| WebCode | 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

|        |                                    |            |       |           |       |       |
|--------|------------------------------------|------------|-------|-----------|-------|-------|
| MBQFZG | GlobalFiler™                       |            |       |           |       |       |
|        | 14,16.3                            | 17,24      | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13         | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2    | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |            |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11         |       |           | 2     |       |
| MGCKNB | PowerPlex® Fusion 6C               |            |       |           |       |       |
|        | 14,16.3                            | 17,24      | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2    | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14      | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11         | 17    | 19        |       |       |
| MHRUM4 | GlobalFiler™                       |            |       |           |       |       |
|        | 14,16.3                            | 17,24      | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2    | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |            |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11         |       |           | 2     |       |
| MUF32W | GlobalFiler™                       |            |       |           |       |       |
|        | 14,16.3                            | 17,24      | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2    | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |            |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11         |       |           | 2     |       |
| MW4GQ7 | GlobalFiler™ Express               |            |       |           |       |       |
|        | 14,16.3                            | 17,24      | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13         | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2    | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |            |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11         |       |           | 2     |       |
| NJD32X | PowerPlex® Fusion 6C, GlobalFiler™ |            |       |           |       |       |
|        | 14,16.3                            | 17,[23],24 | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2    | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |            |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11         |       |           | 2     |       |
| PCEV4A | PowerPlex® Fusion 6C               |            |       |           |       |       |
|        | 14,16.3                            | 17,24      | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2    | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14      | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11         | 17    | 19        |       |       |

TABLE 1

| WebCode | 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

|        |                          |         |       |           |       |       |
|--------|--------------------------|---------|-------|-----------|-------|-------|
| PE2ATJ | Investigator® 24plex GO! |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |
| PEYP2A | PowerPlex® Fusion 5C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |           |       |       |
| PK4GA8 | PowerPlex® ESX 16 FAST   |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     |       |       |
| 2      |                          | 13      | 13,14 | 18,21     |       | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   |       |
|        | 20,22                    |         |       |           | 9,9.3 |       |
|        | 14,17                    |         |       |           |       |       |
| Q4UYT8 | GlobalFiler™             |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |           | 2     |       |
| Q67QRF | Investigator® 24plex GO! |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 | N/A   |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | N/A     | N/A   | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      | N/A   | N/A       | N/A   |       |
| QA2KPG | GlobalFiler™ (STRmix)    |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           | 2     |       |
| QA2Z6H |                          |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |           | 2     |       |

TABLE 1

| WebCode | 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

|        |                                    |         |       |           |       |       |
|--------|------------------------------------|---------|-------|-----------|-------|-------|
| QBZX9  | PowerPlex® Fusion 6C               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |
| QVJWAR | PowerPlex® Fusion 5C               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           |       |       |
| QWR3T8 | PowerPlex® Fusion 6C               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      | 17    | 19        |       |       |
| QWX28Q | GlobalFiler™                       |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           | 2     |       |
| QZELU7 | PowerPlex® Fusion 6C               |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |
| QZFGGH | Investigator® 24plex GO!           |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           |       |       |
| R4PY8X | PowerPlex® Fusion 6C, GlobalFiler™ |         |       |           |       |       |
|        | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           | 2     |       |

TABLE 1

| WebCode | 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

|        |                                    |         |       |           |       |       |
|--------|------------------------------------|---------|-------|-----------|-------|-------|
| R8UK4B | PowerPlex® Fusion                  |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           |       |       |
| REB3J4 | PowerPlex® Fusion 6C               |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |
| RHBA3F | Investigator® 24plex GO!           |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           |       |       |
| RNBZYQ | GlobalFiler™ (STRmix)              |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           | 2     |       |
| RNCTWY | PowerPlex® Fusion                  |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                              | 11      |       |           |       |       |
| RNYYGX | PowerPlex® Fusion 6C, GlobalFiler™ |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      |       |           | 2     |       |
| RPBNQ3 | PowerPlex® Fusion 6C               |         |       |           |       |       |
| 2      | 14,16.3                            | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                               | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                              | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                              | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                              | 11      | 17    | 19        |       |       |

TABLE 1

| WebCode | 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

|        |                          |         |       |           |       |       |
|--------|--------------------------|---------|-------|-----------|-------|-------|
| RX4YXC | PowerPlex® Fusion        |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |           |       |       |
| T8BX8E | GlobalFiler™             |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |           | 2     |       |
| TAFQ2C | Investigator® 24plex GO! |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |
| TFG3XA | PowerPlex® Fusion 6C     |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| TGVC34 | PowerPlex® Fusion 6C     |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| TLNE9N | GlobalFiler™             |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           | 2     |       |
| TXJHHA | PowerPlex® Fusion        |         |       |           |       |       |
| 2      | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
|        | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                    | 11      |       |           |       |       |

TABLE 1

| WebCode | 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

|        |                               |         |       |           |       |       |
|--------|-------------------------------|---------|-------|-----------|-------|-------|
| TXY238 | PowerPlex® Fusion 6C          |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                         | 11      | 17    | 19        |       |       |
| U3C4P3 | PowerPlex® 21                 |         |       |           |       |       |
|        | 14,16.3                       | 17,24   |       | 16,18     | 11,12 | 11,13 |
| 2      | 9,11                          | 13,13   |       | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 |           | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                         |         |       |           |       |       |
| U6D6PZ | PowerPlex® Fusion 6C          |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                         | 11      | 17    | 19        |       |       |
| UXDWYY | GlobalFiler™ Express (STRmix) |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           | 2     |       |
| UYCTT3 | Identifier® Plus              |         |       |           |       |       |
|        |                               | 17,24   |       | 16,18     | 11,12 |       |
| 2      | 9,11                          | 13,13   |       |           | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 |           | X,Y   | 11,12 |
|        | 20,22                         |         |       |           | 9,9.3 | 8,8   |
|        | 14,17                         |         |       |           |       |       |
| VHXLXC | NGM SElect                    |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     |       |       |
| 2      |                               | 13,13   | 13,14 | 18,21     |       | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y   |       |
|        | 20,22                         |         |       | 29.2,29.2 | 9,9.3 |       |
|        | 14,17                         |         |       |           |       |       |
| VLJTE7 | GlobalFiler™                  |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           | 2     |       |

TABLE 1

| WebCode | 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

|        |                      |         |         |       |           |       |
|--------|----------------------|---------|---------|-------|-----------|-------|
| VTZA49 | PowerPlex® Fusion 6C | 14,16.3 | 17,24   | 11,14 | 16,18     | 11,12 |
| 2      |                      | 9,11    | 13,13   | 13,14 | 18,21     | 11,14 |
|        |                      | 16,17   | 15,16.2 | 30,30 | 15,16     | X,Y   |
|        |                      | 20,22   | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 |
|        |                      | 14,17   | 11      | 17    | 19        | 8,8   |
|        |                      |         |         |       |           |       |
| W7K9A2 | PowerPlex® Fusion 6C | 14,16.3 | 17,24   | 11,14 | 16,18     | 11,12 |
| 2      |                      | 9,11    | 13,13   | 13,14 | 18,21     | 11,14 |
|        |                      | 16,17   | 15,16.2 | 30,30 | 15,16     | X,Y   |
|        |                      | 20,22   | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 |
|        |                      | 14,17   | 11      | 17    | 19        | 8,8   |
|        |                      |         |         |       |           |       |
| WHRQRC | PowerPlex® ESI17     | 14,16.3 | 17,24   | 11,14 | 16,18     |       |
| 2      |                      |         | 13      | 13,14 | 18,21     | 11,12 |
|        |                      | 16,17   | 15,16.2 | 30    | 15,16     | X,Y   |
|        |                      | 20,22   |         |       | 29.2      | 9,9.3 |
|        |                      | 14,17   |         |       |           |       |
|        |                      |         |         |       |           |       |
| WR3HAZ | PowerPlex® Fusion 6C | 14,16.3 | 17,24   | 11,14 | 16,18     | 11,12 |
| 2      |                      | 9,11    | 13,13   | 13,14 | 18,21     | 11,14 |
|        |                      | 16,17   | 15,16.2 | 30,30 | 15,16     | X,Y   |
|        |                      | 20,22   | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 |
|        |                      | 14,17   | 11      | 17    | 19        | 8,8   |
|        |                      |         |         |       |           |       |
| WWE77P | PowerPlex® Fusion 6C | 14,16.3 | 17,24   | 11,14 | 16,18     | 11,12 |
| 2      |                      | 9,11    | 13,13   | 13,14 | 18,21     | 11,14 |
|        |                      | 16,17   | 15,16.2 | 30,30 | 15,16     | X,Y   |
|        |                      | 20,22   | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 |
|        |                      | 14,17   | 11      | 17    | 19        | 8,8   |
|        |                      |         |         |       |           |       |
| X3DFN3 | Identifier® Direct   |         | 17,24   |       | 16,18     | 11,12 |
| 2      |                      | 9,11    | 13      |       |           | 11,14 |
|        |                      | 16,17   | 15,16.2 | 30    |           | X,Y   |
|        |                      | 20,22   |         |       |           | 9,9.3 |
|        |                      | 14,17   |         |       |           | 8     |
|        |                      |         |         |       |           |       |
| X8AW99 | GlobalFiler™         | 14,16.3 | 17,24   | 11,14 | 16,18     | 11,12 |
| 2      |                      | 9,11    | 13,13   | 13,14 | 18,21     | 11,14 |
|        |                      | 16,17   | 15,16.2 | 30,30 | 15,16     | X,Y   |
|        |                      | 20,22   |         |       | 29.2,29.2 | 9,9.3 |
|        |                      | 14,17   | 11      |       |           | 8,8   |
|        |                      |         |         |       |           | 2     |

TABLE 1

| WebCode | 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

|        |                          |         |       |           |       |       |
|--------|--------------------------|---------|-------|-----------|-------|-------|
| XC8DL3 | PowerPlex® Fusion 6C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                    | 11      | 17    | 19        |       |       |
| XCNGA3 | Identifier® Direct       |         |       |           |       |       |
|        |                          | 17,24   |       | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      |       |           | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    |           | X,Y   | 11,12 |
|        | 20,22                    |         |       |           | 9,9.3 | 8     |
|        | 14,17                    |         |       |           |       |       |
| XDYG9H | PowerPlex® Fusion 5C     |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |
| XG38J4 | GlobalFiler™ (STRmix)    |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           | 2     |       |
| XGXR4H | GlobalFiler™             |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           | 2     |       |
| XHCCU8 | Investigator® 24plex GO! |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |
| XNHTKV | PowerPlex® Fusion        |         |       |           |       |       |
|        | 14,16.3                  | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                     | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                    | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                    | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                    | 11      |       |           |       |       |

TABLE 1

| WebCode | 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

|        |                       |         |       |           |       |       |
|--------|-----------------------|---------|-------|-----------|-------|-------|
| XPRVAZ | Investigator® 24plex  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |           |       |       |
| XRWJUW | PowerPlex® Fusion 6C  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                 | 11      | 17    | 19        |       |       |
| XU7FEZ | Investigator® 24plex  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |           |       |       |
| YCZL8R | GlobalFiler™          |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                 | 11      |       |           | 2     |       |
| YRVV3K | GlobalFiler™ (STRmix) |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           | 2     |       |
| YRXMZR | PowerPlex® Fusion     |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                 | 11      |       |           |       |       |
| ZARTPX | PowerPlex® Fusion 6C  |         |       |           |       |       |
|        | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 2      | 9,11                  | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2      | 9,9.3 | 8     |
|        | 14,17                 | 11      | 17    | 19        |       |       |

TABLE 1

| WebCode | 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

|        |                           |         |            |            |            |            |
|--------|---------------------------|---------|------------|------------|------------|------------|
| ZAUM94 | PowerPlex® Fusion         |         |            |            |            |            |
| 2      | 14,16.3                   | 17,24   | 11,14      | 16,18      | 11,12      |            |
|        | 9,11                      | 13,13   | 13,14      | 18,21      | 11,14      | 11,12      |
|        | 16,17                     | 15,16.2 | 30,30      | 15,16      | X,Y        | 11,12      |
|        | 20,22                     | 12,14   | 10,14      |            | 9,9.3      | 8,8        |
|        | 14,17                     | 11      |            |            |            |            |
| ZEH8BY | PowerPlex® Fusion 5C      |         |            |            |            |            |
| 2      | 14,16.3                   | 17,24   | 11,14      | 16,18      | 11,12      | Not Tested |
|        | 9,11                      | 13,13   | 13,14      | 18,21      | 11,14      | 11,12      |
|        | 16,17                     | 15,16.2 | 30,30      | 15,16      | X,Y        | 11,12      |
|        | 20,22                     | 12,14   | 10,14      | Not Tested | 9,9.3      | 8,8        |
|        | 14,17                     | 11      | Not Tested | Not Tested | Not Tested |            |
| ZKAHKW | GlobalFiler™ (TrueAllele) |         |            |            |            |            |
| 2      | 14,16.3                   | 17,24   | 11,14      | 16,18      | 11,12      |            |
|        | 9,11                      | 13      | 13,14      | 18,21      | 11,14      | 11,12      |
|        | 16,17                     | 15,16.2 | 30         | 15,16      | X,Y        | 11,12      |
|        | 20,22                     |         |            | 29.2       | 9,9.3      | 8          |
|        | 14,17                     | 11      |            |            | 2          |            |
| ZWHZEL | GlobalFiler™              |         |            |            |            |            |
| 2      | 14,16.3                   | 17,24   | 11,14      | 16,18      | 11,12      |            |
|        | 9,11                      | 13      | 13,14      | 18,21      | 11,14      | 11,12      |
|        | 16,17                     | 15,16.2 | 30         | 15,16      | X,Y        | 11,12      |
|        | 20,22                     |         |            | 29.2       | 9,9.3      | 8          |
|        | 14,17                     | 11      |            |            | 2          |            |
| ZYA44L | PowerPlex® Fusion 6C      |         |            |            |            |            |
| 2      | 14,16.3                   | 17,24   | 11,14      | 16,18      | 11,12      |            |
|        | 9,11                      | 13,13   | 13,14      | 18,21      | 11,14      | 11,12      |
|        | 16,17                     | 15,16.2 | 30,30      | 15,16      | X,Y        | 11,12      |
|        | 20,22                     | 12,14   | 10,14      | 29.2,29.2  | 9,9.3      | 8,8        |
|        | 14,17                     | 11      | 17         | 19         |            |            |

TABLE 1

| WebCode | 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

|        |                       |       |           |       |       |       |
|--------|-----------------------|-------|-----------|-------|-------|-------|
| 2JRNH2 | PowerPlex® Fusion 6C  |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |
| 2TUB6R | GlobalFiler™ (STRmix) |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| 2VNYNN | GlobalFiler™          |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10    |           |       | 2     |       |
| 38ZG4X | PowerPlex® Fusion 6C  |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |
| 3BW84H | GlobalFiler™          |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| 3DZ6CP | GlobalFiler™          |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| 3EY27T | PowerPlex® Fusion 6C  |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |

TABLE 1

| WebCode | 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

|        |                       |       |           |       |       |       |
|--------|-----------------------|-------|-----------|-------|-------|-------|
| 3NYTCY | GlobalFiler™ (STRmix) |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| 4EQNTG | GlobalFiler™          |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| 4GD3HQ | PowerPlex® Fusion     |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     |       | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       |       |       |
| 4NEG6D | GlobalFiler™          |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| 4X46XU | GlobalFiler™          |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| 4YWYXK | GlobalFiler™          |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| 66H4ER | PowerPlex® Fusion 6C  |       |           |       |       |       |
|        | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |

TABLE 1

| WebCode              | 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 |  |         |           |          |            |         |
| 66J9KM               | GlobalFiler™   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                      | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17   | 10      |           |          | 2          |         |
| 69HFAR               | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      | 19        | 20       |            |         |
| 69HJGM               | GlobalFiler™   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                      | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17   | 10      |           |          | 2          |         |
| 6JJRHE               | GlobalFiler™ (STRmix)                                  |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                      | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17   | 10      |           |          | 2          |         |
| 6K9DTG               | GlobalFiler™   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                      | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17   | 10      |           |          | 2          |         |
| 6YP97R               | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      | 19        | 20       |            |         |
| 7A93XE               | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      | 19        | 20       |            |         |

TABLE 1

| WebCode | 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

|        |                      |       |           |       |       |       |
|--------|----------------------|-------|-----------|-------|-------|-------|
| 7HHCMT | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       | 2     |       |
| 7KLAUF | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| 7KM3RM | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       | 2     |       |
| 7NUB3T | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| 7QE6YT | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    |           |       | 2     |       |
| 7RQ4RG | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       | 2     |       |
| 7RRYFT | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    |           |       | 2     |       |

TABLE 1

| WebCode                     | 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    |         |
| <b>Item 3 - STR Results</b> |  |         |           |          |            |         |
| 7VRGN3                      | GlobalFiler™   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                             | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                             | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                             | 17   | 10      |           |          | 2          |         |
| 8CTDAP                      | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                             | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                             | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                             | 17,17  | 10      | 19        | 20       |            |         |
| 8DQFJN                      | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                             | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                             | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                             | 17,17  | 10      | 19        | 20       |            |         |
| 8HF27G                      | GlobalFiler™   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                             | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                             | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                             | 17   | 10      |           |          | 2          |         |
| 8KJYFN                      | GlobalFiler™   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                             | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                             | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                             | 17,17  | 10      |           |          | 2          |         |
| 96QUX2                      | Identifier® Plus                                       |         |           |          |            |         |
|                             |  | 20,25   |           | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13,13   |           |          | 9,9        | 10,12   |
|                             | 13,14  | 13,16   | 31.2,31.2 |          | X,Y        | 10,11   |
|                             | 20,23  |         |           |          | 7,9,3      | 8,11    |
|                             | 17,17  |         |           |          |            |         |
| 97JFFC                      | GlobalFiler™   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                             | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                             | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                             | 17   | 10      |           |          | 2          |         |

TABLE 1

| WebCode | 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

|        |                      |       |           |       |       |       |
|--------|----------------------|-------|-----------|-------|-------|-------|
| 9DG8LK | GlobalFiler™         |       |           |       |       |       |
|        | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       | 2     |       |
| 9LAHWF | GlobalFiler™         |       |           |       |       |       |
|        | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       | 2     |       |
| 9NXWKP | Identifiler® Plus    |       |           |       |       |       |
|        |                      | 20,25 |           | 14,17 | 12,13 |       |
| 3      | 7,11                 | 13    |           |       | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      |       | X,Y   | 10,11 |
|        | 20,23                |       |           |       | 7,9,3 | 8,11  |
|        | 17                   |       |           |       |       |       |
| 9PWWNV | PowerPlex® Fusion 6C |       |           |       |       |       |
|        | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| 9QAJ6P | PowerPlex® Fusion 6C |       |           |       |       |       |
|        | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| 9V3NTM | GlobalFiler™         |       |           |       |       |       |
|        | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    |           |       | 2     |       |
| 9ZEG6L | GlobalFiler™         |       |           |       |       |       |
|        | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       | 2     |       |

TABLE 1

| WebCode              | 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 |  |         |           |          |            |         |
| A6LKEK               | PowerPlex® Fusion 6C (STRmix)                          |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      | 19        | 20       |            |         |
| A86L98               | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                      | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                      | 17   | 10      | 19        | 20       |            |         |
| A9Z4B9               | GlobalFiler™ (STRmix)                                  |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                      | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17   | 10      |           |          | 2          |         |
| ADY9CT               | PowerPlex® Fusion                                      |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     |          | 7,9,3      | 8,11    |
|                      | 17,17  | 10      |           |          |            |         |
| AF3DJL               | Investigator® 24plex                                   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      |           |          |            |         |
| AGXWKM               | Investigator® 24plex                                   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      |           |          |            |         |
| AJ2MUN               | GlobalFiler™   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      |           |          | 2          |         |

TABLE 1

| WebCode | 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

|        |                            |       |           |       |       |       |
|--------|----------------------------|-------|-----------|-------|-------|-------|
| APBNBL | PowerPlex® Fusion          |       |           |       |       |       |
|        | 15,15.3                    | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                       | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                      | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                      | 9,13  | 12,13     |       | 7,9,3 | 8,11  |
|        | 17                         | 10    |           |       |       |       |
| ATNQTB | PowerPlex® Fusion 6C       |       |           |       |       |       |
|        | 15,15.3                    | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                       | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                      | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                      | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                      | 10    | 19        | 20    |       |       |
| AZB8WL | PowerPlex® Fusion 6C       |       |           |       |       |       |
|        | 15,15.3                    | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                       | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                      | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                      | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                      | 10    | 19        | 20    |       |       |
| B6LNKG | PowerPlex® Fusion          |       |           |       |       |       |
|        | 15,15.3                    | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                       | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                      | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                      | 9,13  | 12,13     |       | 7,9,3 | 8,11  |
|        | 17                         | 10    |           |       |       |       |
| B6Y9DQ | GlobalFiler™ (STRmix v2.7) |       |           |       |       |       |
|        | 15,15.3                    | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                       | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                      | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                      |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                         | 10    |           |       | 2     |       |
| B6ZBXP | PowerPlex® 6C              |       |           |       |       |       |
|        | 15,15.3                    | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                       | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                      | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                      | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                      | 10    | 19        | 20    |       |       |
| BB6A8T | PowerPlex® Fusion 6C       |       |           |       |       |       |
|        | 15,15.3                    | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                       | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                      | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                      | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                      | 10    | 19        | 20    |       |       |

TABLE 1

| WebCode | 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

|        |                                     |       |           |       |       |       |
|--------|-------------------------------------|-------|-----------|-------|-------|-------|
| BVBMYF | PowerPlex® Fusion                   |       |           |       |       |       |
| 3      | 15,15.3                             | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                                | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                               | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                               | 9,13  | 12,13     |       | 7,9,3 | 8,11  |
|        | 17                                  | 10    |           |       |       |       |
| BWBHTK | PowerPlex® Fusion 6C                |       |           |       |       |       |
| 3      | 15,15.3                             | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                                | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                               | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                               | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                               | 10    | 19        | 20    |       |       |
| BYBTHR | PowerPlex® Fusion 6C                |       |           |       |       |       |
| 3      | 15,15.3                             | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                                | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                               | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                               | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                               | 10    | 19        | 20    |       |       |
| BYUJM7 | PowerPlex® Fusion 6C (STRmix 2.6.3) |       |           |       |       |       |
| 3      | 15,15.3                             | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                                | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                               | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                               | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17                                  | 10    | 19        | 20    |       |       |
| C3NZD6 | PowerPlex® Fusion 6C                |       |           |       |       |       |
| 3      | 15,15.3                             | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                                | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                               | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                               | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                               | 10    | 19        | 20    |       |       |
| C4JHE7 | GlobalFiler™ (STRmix)               |       |           |       |       |       |
| 3      | 15,15.3                             | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                                | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                               | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                               |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                                  | 10    |           |       | 2     |       |
| CYRCXJ | GlobalFiler™                        |       |           |       |       |       |
| 3      | 15,15.3                             | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                                | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                               | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                               |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                               | 10    |           |       | 2     |       |

TABLE 1

| WebCode | 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

|        |                       |            |            |       |       |       |
|--------|-----------------------|------------|------------|-------|-------|-------|
| D8YDL  | GlobalFiler™ (STRmix) |            |            |       |       |       |
|        | 15,15.3               | 20,25      | 11.3,14    | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13         | 14         | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16      | 31.2       | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |            |            | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10         |            |       | 2     |       |
| DHVD89 | PowerPlex® Fusion 6C  |            |            |       |       |       |
|        | 15,15.3               | 20,25      | 11.3,14    | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13,13      | 14,14      | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16      | 31.2,31.2  | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13       | 12,13      | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10         | 19         | 20    |       |       |
| DK4N4C | GlobalFiler™          |            |            |       |       |       |
|        | 15,15.3               | 20,25      | 11.3,14    | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13,13      | 14,14      | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16      | 31.2,31.2  | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |            |            | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10         |            |       | 2     |       |
| EHT7HK | Identifier® Plus      |            |            |       |       |       |
|        |                       | 20,25      |            | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13         |            |       | 9     | 10,12 |
|        | 13,14                 | 13,16      | 31.2       |       | X,Y   | 10,11 |
|        | 20,23                 |            |            |       | 7,9,3 | 8,11  |
|        | 17                    |            |            |       |       |       |
| EM9GT4 | GlobalFiler™ (STRmix) |            |            |       |       |       |
|        | 15,15.3               | 20,25      | 11.3,14    | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13         | 14         | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16      | 31.2       | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |            |            | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10         |            |       | 2     |       |
| EPD3PG | Investigator® 24plex  |            |            |       |       |       |
|        | 15,15.3               | 20,25      | 11.3,14    | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13,13      | 14,14      | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16      | 31.2,31.2  | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | Not Tested | Not Tested | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10         |            |       |       |       |
| EQQN4P | PowerPlex® Fusion     |            |            |       |       |       |
|        | 15,15.3               | 20,25      | 11.3,14    | 14,17 | 12,13 |       |
| 3      | 7,11                  | 13,13      | 14,14      | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16      | 31.2,31.2  | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13       | 12,13      |       | 7,9,3 | 8,11  |
|        | 17,17                 | 10         |            |       |       |       |

TABLE 1

| WebCode | 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

|         |                                    |         |           |       |         |       |
|---------|------------------------------------|---------|-----------|-------|---------|-------|
| EU74PA  | GlobalFiler™                       |         |           |       |         |       |
|         | 15,15.3                            | 20,25   | 11.3,14   | 14,17 | 12,13   |       |
| 3       | 7,11                               | 13      | 14        | 18,19 | 9       | 10,12 |
|         | 13,14                              | 13,16   | 31.2      | 15,17 | X,Y     | 10,11 |
|         | 20,23                              |         |           | 16,17 | 7,9,3   | 8,11  |
|         | 17                                 | 10      |           |       | 2       |       |
| EVH3JJ  | GlobalFiler™                       |         |           |       |         |       |
|         | 15,15.3                            | 20,25   | 11.3,14   | 14,17 | 12,13   |       |
| 3       | 7,11                               | 13      | 14        | 18,19 | 9       | 10,12 |
|         | 13,14                              | 13,16   | 31.2      | 15,17 | X,Y     | 10,11 |
|         | 20,23                              |         |           | 16,17 | 7,9,3   | 8,11  |
|         | 17                                 | 10      |           |       | 2       |       |
| EW DLLK | GlobalFiler™                       |         |           |       |         |       |
|         | 15,15.3                            | {20,25} | 11.3,14   | 14,17 | 12,13   |       |
| 3       | 7,11                               | 13,13   | 14,14     | 18,19 | 9,9     | 10,12 |
|         | 13,14                              | 13,16   | 31.2,31.2 | 15,17 | X,Y     | 10,11 |
|         | 20,23                              |         |           | 16,17 | {7,9,3} | 8,11  |
|         | 17,17                              | 10      |           |       | 2       |       |
| EWUHDK  | GlobalFiler™                       |         |           |       |         |       |
|         | 15,15.3                            | 20,25   | 11.3,14   | 14,17 | 12,13   |       |
| 3       | 7,11                               | 13,13   | 14,14     | 18,19 | 9,9     | 10,12 |
|         | 13,14                              | 13,16   | 31.2,31.2 | 15,17 | X,Y     | 10,11 |
|         | 20,23                              |         |           | 16,17 | 7,9,3   | 8,11  |
|         | 17,17                              | 10      |           |       | 2       |       |
| F3X4G8  | GlobalFiler™ IQC                   |         |           |       |         |       |
|         | 15,15.3                            | 20,25   | 11.3,14   | 14,17 | 12,13   |       |
| 3       | 7,11                               | 13,13   | 14,14     | 18,19 | 9,9     | 10,12 |
|         | 13,14                              | 13,16   | 31.2,31.2 | 15,17 | X,Y     | 10,11 |
|         | 20,23                              |         |           | 16,17 | 7,9,3   | 8,11  |
|         | 17,17                              | 10      |           |       | 2       |       |
| FB9639  | PowerPlex® Fusion 6C, GlobalFiler™ |         |           |       |         |       |
|         | 15,15.3                            | 20,25   | 11.3,14   | 14,17 | 12,13   |       |
| 3       | 7,11                               | 13      | 14        | 18,19 | 9       | 10,12 |
|         | 13,14                              | 13,16   | 31.2      | 15,17 | X,Y     | 10,11 |
|         | 20,23                              | 9,13    | 12,13     | 16,17 | 7,9,3   | 8,11  |
|         | 17                                 | 10      | 19        | 20    | 2       |       |
| FCJ62N  | PowerPlex® Fusion 6C               |         |           |       |         |       |
|         | 15,15.3                            | 20,25   | 11.3,14   | 14,17 | 12,13   |       |
| 3       | 7,11                               | 13,13   | 14,14     | 18,19 | 9,9     | 10,12 |
|         | 13,14                              | 13,16   | 31.2,31.2 | 15,17 | X,Y     | 10,11 |
|         | 20,23                              | 9,13    | 12,13     | 16,17 | 7,9,3   | 8,11  |
|         | 17,17                              | 10      | 19        | 20    |         |       |

TABLE 1

| WebCode | 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

|        |                      |       |           |       |       |       |
|--------|----------------------|-------|-----------|-------|-------|-------|
| FFHGWN | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| FQLUXN | PowerPlex® Fusion    |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     |       | 7,9,3 | 8,11  |
|        | 17,17                | 10    |           |       |       |       |
| G7B4CD | PowerPlex® Fusion    |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     |       | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       |       |       |
| G8BY6H | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| GHP2H3 | PowerPlex® Fusion 5C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     |       | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       |       |       |
| GJZ8F4 | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| GQXUBA | PowerPlex® Fusion    |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     |       | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       |       |       |

TABLE 1

| WebCode | 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

|        |                       |       |           |       |       |       |
|--------|-----------------------|-------|-----------|-------|-------|-------|
| GRRJT6 | PowerPlex® Fusion 5C  |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     |       | 7,9.3 | 8,11  |
|        | 17                    | 10    |           |       |       |       |
| GUGRYZ | GlobalFiler™ (STRmix) |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9.3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| GWRMRJ | PowerPlex® 6C         |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |
| GXLBAE | PowerPlex® Fusion 6C  |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |
| H42DQF | GlobalFiler™          |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                 | 10    |           |       | 2     |       |
| H4LAWN | GlobalFiler™          |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                 | 10    |           |       | 2     |       |
| HBKL7Z | PowerPlex® Fusion 6C  |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |

TABLE 1

| WebCode                     | 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    |         |
| <b>Item 3 - STR Results</b> |  |         |           |          |            |         |
| HFFBQD                      | PowerPlex® Fusion                                      |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                             | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                             | 20,23  | 9,13    | 12,13     |          | 7,9,3      | 8,11    |
|                             | 17   | 10      |           |          |            |         |
| HXCZM8                      | GlobalFiler™   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                             | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                             | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                             | 17,17  | 10      |           |          | 2          |         |
| JXANJB                      | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                             | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                             | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                             | 17,17  | 10      | 19        | 20       |            |         |
| K8C9JH                      | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                             | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                             | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                             | 17,17  | 10      | 19        | 20       |            |         |
| K9KKWD                      | GlobalFiler™   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                             | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                             | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                             | 17   | 10      |           |          | 2          |         |
| KECM6K                      | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                             | 13,14  | 13,16   | 31.2,31.2 | 15,17    | X,Y        | 10,11   |
|                             | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                             | 17,17  | 10      | 19        | 20       |            |         |
| KUM9NA                      | GlobalFiler™   |         |           |          |            |         |
|                             | 15,15.3  | 20,25   | 11.3,14   | 14,17    | 12,13      |         |
| 3                           | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                             | 13,14  | 13,16   | 31.2      | 15,17    | X,Y        | 10,11   |
|                             | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                             | 17   | 10      |           |          | 2          |         |

TABLE 1

| WebCode | 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

|        |                       |       |           |       |       |       |
|--------|-----------------------|-------|-----------|-------|-------|-------|
| KWTQQC | PowerPlex® Fusion 6C  |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |
| KWVGYF | GlobalFiler™ (STRmix) |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9.3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| KY249D | PowerPlex® Fusion 6C  |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |
| L66AJA | GlobalFiler™          |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                 | 10    |           |       | 2     |       |
| LB8JP3 | GlobalFiler™          |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9.3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| LH89HM | GlobalFiler™ RapidDNA |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9.3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| LNY6XJ | PowerPlex® Fusion 6C  |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |

TABLE 1

| WebCode | 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

|        |                      |       |           |       |       |       |
|--------|----------------------|-------|-----------|-------|-------|-------|
| LQ6LBG | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| LTPF8G | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| LYYFPE | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       | 2     |       |
| M7VXB  | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| MBQFZG | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                   | 10    |           |       | 2     |       |
| MGCKNB | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    |           |       | 2     |       |
| MHRUM4 | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                | 10    |           |       | 2     |       |

TABLE 1

| WebCode | 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

|        |                               |       |           |       |       |       |
|--------|-------------------------------|-------|-----------|-------|-------|-------|
| MW4GQ7 | GlobalFiler™                  |       |           |       |       |       |
| 3      | 15,15.3                       | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                          | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                         | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                         |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                            | 10    |           |       | 2     |       |
| NJD32X | GlobalFiler™                  |       |           |       |       |       |
| 3      | 15,15.3                       | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                          | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                         | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                         |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                         | 10    |           |       | 2     |       |
| PCEV4A | PowerPlex® Fusion 6C          |       |           |       |       |       |
| 3      | 15,15.3                       | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                          | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                         | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                         | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                         | 10    | 19        | 20    |       |       |
| PEYP2A | Investigator® 24plex (STRmix) |       |           |       |       |       |
| 3      | 15,15.3                       | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                          | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                         | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                         |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                         | 10    |           |       |       |       |
| PK4GA8 | PowerPlex® ESX 16 FAST        |       |           |       |       |       |
| 3      | 15,15.3                       | 20,25 | 11.3,14   | 14,17 |       |       |
|        |                               | 13    | 14        | 18,19 |       | 10,12 |
|        | 13,14                         | 13,16 | 31.2,31.2 | 15,17 | X,Y   |       |
|        | 20,23                         |       |           |       | 7,9,3 |       |
|        | 17                            |       |           |       |       |       |
| Q4UYT8 | PowerPlex® Fusion 6C          |       |           |       |       |       |
| 3      | 15,15.3                       | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                          | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                         | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                         | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                         | 10    | 19        | 20    |       |       |
| QA2KPG | GlobalFiler™ (STRmix)         |       |           |       |       |       |
| 3      | 15,15.3                       | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                          | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                         | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                         |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                            | 10    |           |       | 2     |       |

TABLE 1

| WebCode | 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**

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| QA2Z6H | GlobalFiler™ |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31,2,31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  | 2 |  |
| QBZX9 | GlobalFiler™ |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31,2,31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  | 2 |  |
| QVJWAR | PowerPlex® Fusion 5C |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13 | 14 | 18,19 | 9 | 10,12 |
|  | 13,14 | 13,16 | 31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 |  | 7,9,3 | 8,11 |
|  | 17 | 10 |  |  |  |  |
| QWR3T8 | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13 | 14 | 18,19 | 9 | 10,12 |
|  | 13,14 | 13,16 | 31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 | 16,17 | 7,9,3 | 8,11 |
|  | 17 | 10 | 19 | 20 |  |  |
| QWX28Q | GlobalFiler™ |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13 | 14 | 18,19 | 9 | 10,12 |
|  | 13,14 | 13,16 | 31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17 | 10 |  |  | 2 |  |
| QZELU7 | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31,2,31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 | 16,17 | 7,9,3 | 8,11 |
|  | 17,17 | 10 | 19 | 20 |  |  |
| R4PY8X | GlobalFiler™ |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31,2,31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  | 2 |  |

TABLE 1

| WebCode | 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**

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| R8UK4B | PowerPlex® Fusion |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31,2,31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 |  | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  |  |  |
| REB3J4 | GlobalFiler™ |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31,2,31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  | 2 |  |
| RNBZYQ | GlobalFiler™ (STRmix) |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13 | 14 | 18,19 | 9 | 10,12 |
|  | 13,14 | 13,16 | 31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17 | 10 |  |  | 2 |  |
| RNCTWY | PowerPlex® Fusion |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13 | 14 | 18,19 | 9 | 10,12 |
|  | 13,14 | 13,16 | 31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 |  | 7,9,3 | 8,11 |
|  | 17 | 10 |  |  |  |  |
| RNYYGX | GlobalFiler™ |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31,2,31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  | 2 |  |
| RPBNQ3 | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31,2,31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 | 16,17 | 7,9,3 | 8,11 |
|  | 17,17 | 10 | 19 | 20 |  |  |
| RX4YXC | PowerPlex® Fusion |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11,3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31,2,31,2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 |  | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  |  |  |

TABLE 1

| WebCode              | 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 |  |         |           |          |            |         |
| T8BX8E               | GlobalFiler™   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11,3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31,2,31,2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      |           |          | 2          |         |
| TFG3XA               | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11,3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31,2,31,2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      | 19        | 20       |            |         |
| TGVC34               | Investigator® 24plex                                   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11,3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31,2,31,2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      |           |          |            |         |
| TLNE9N               | GlobalFiler™   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11,3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13      | 14        | 18,19    | 9          | 10,12   |
|                      | 13,14  | 13,16   | 31,2      | 15,17    | X,Y        | 10,11   |
|                      | 20,23  |         |           | 16,17    | 7,9,3      | 8,11    |
|                      | 17   | 10      |           |          | 2          |         |
| TXJHHA               | PowerPlex® Fusion                                      |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11,3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31,2,31,2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     |          | 7,9,3      | 8,11    |
|                      | 17,17  | 10      |           |          |            |         |
| TXY238               | PowerPlex® Fusion 6C                                   |         |           |          |            |         |
|                      | 15,15.3  | 20,25   | 11,3,14   | 14,17    | 12,13      |         |
| 3                    | 7,11   | 13,13   | 14,14     | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31,2,31,2 | 15,17    | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     | 16,17    | 7,9,3      | 8,11    |
|                      | 17,17  | 10      | 19        | 20       |            |         |
| U3C4P3               | PowerPlex® 21 (STRmix)                                 |         |           |          |            |         |
|                      | 15,15.3  | 20,25   |           | 14,17    | 12,13      | 9,13    |
| 3                    | 7,11   | 13,13   |           | 18,19    | 9,9        | 10,12   |
|                      | 13,14  | 13,16   | 31,2,31,2 |          | X,Y        | 10,11   |
|                      | 20,23  | 9,13    | 12,13     |          | 7,9,3      | 8,11    |
|                      | 17,17  |         |           |          |            |         |

TABLE 1

| WebCode | 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

|        |                       |       |           |       |       |       |
|--------|-----------------------|-------|-----------|-------|-------|-------|
| U6D6PZ | PowerPlex® Fusion 6C  |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |
| UXDWYY | GlobalFiler™ (STRmix) |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| UYCTT3 | Identifiler® Plus     |       |           |       |       |       |
| 3      |                       | 20,25 |           | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 |           |       | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 |       | X,Y   | 10,11 |
|        | 20,23                 |       |           |       | 7,9,3 | 8,11  |
|        | 17,17                 |       |           |       |       |       |
| VHXLXC | NGM SElect            |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 |       |       |
|        |                       | 13,13 | 14,14     | 18,19 |       | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   |       |
|        | 20,23                 |       |           | 16,17 | 7,9,3 |       |
|        | 17,17                 |       |           |       |       |       |
| VLJTE7 | GlobalFiler™ (STRmix) |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13    | 14        | 18,19 | 9     | 10,12 |
|        | 13,14                 | 13,16 | 31.2      | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17                    | 10    |           |       | 2     |       |
| VTZA49 | PowerPlex® Fusion 6C  |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 | 9,13  | 12,13     | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10    | 19        | 20    |       |       |
| W7K9A2 | GlobalFiler™          |       |           |       |       |       |
| 3      | 15,15.3               | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                  | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                 | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                 |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17                 | 10    |           |       | 2     |       |

TABLE 1

| WebCode | 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

|        |                      |       |           |       |       |       |
|--------|----------------------|-------|-----------|-------|-------|-------|
| WHRQRC | PowerPlex® ESI17     |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 |       |       |
|        |                      | 13    | 14        | 18,19 |       | 10,12 |
|        | 13,14                | 13,16 | 31.2      | 15,17 | X,Y   |       |
|        | 20,23                |       |           | 16,17 | 7,9.3 |       |
|        | 17                   |       |           |       |       |       |
| WR3HAZ | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| WWE77P | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| X3DFN3 | Identifier® Plus     |       |           |       |       |       |
| 3      |                      | 20,25 |           | 14,17 | 12,13 |       |
|        | 7,11                 | 13    |           |       | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      |       | X,Y   | 10,11 |
|        | 20,23                |       |           |       | 7,9.3 | 8,11  |
|        | 17                   |       |           |       |       |       |
| X8AW99 | GlobalFiler™         |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                |       |           | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                | 10    |           |       | 2     |       |
| XC8DL3 | PowerPlex® Fusion 6C |       |           |       |       |       |
| 3      | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
|        | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |
| XCNGA3 | Identifier® Plus     |       |           |       |       |       |
| 3      |                      | 20,25 |           | 14,17 | 12,13 |       |
|        | 7,11                 | 13    |           |       | 9     | 10,12 |
|        | 13,14                | 13,16 | 31.2      |       | X,Y   | 10,11 |
|        | 20,23                |       |           |       | 7,9.3 | 8,11  |
|        | 17                   |       |           |       |       |       |

TABLE 1

| WebCode | 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**

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| XG38J4 | GlobalFiler™ (STRmix) |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11.3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13 | 14 | 18,19 | 9 | 10,12 |
|  | 13,14 | 13,16 | 31.2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17 | 10 |  |  | 2 |  |
| XGXR4H | GlobalFiler™ |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11.3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13 | 14 | 18,19 | 9 | 10,12 |
|  | 13,14 | 13,16 | 31.2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17 | 10 |  |  | 2 |  |
| XNHTKV | PowerPlex® Fusion |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11.3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13 | 14 | 18,19 | 9 | 10,12 |
|  | 13,14 | 13,16 | 31.2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 |  | 7,9,3 | 8,11 |
|  | 17 | 10 |  |  |  |  |
| XPRVAZ | PowerPlex® Fusion 5C |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11.3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31.2,31.2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 |  | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  |  |  |
| XRWJUW | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11.3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31.2,31.2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 |  | 7,9,3 | 8,11 |
|  | 17,17 | 10 | 19 | 20 |  |  |
| XU7FEZ | PowerPlex® Fusion 5C |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11.3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31.2,31.2 | 15,17 | X,Y | 10,11 |
|  | 20,23 | 9,13 | 12,13 |  | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  |  |  |
| YCZL8R | GlobalFiler™ |  |  |  |  |  |
|  | 15,15.3 | 20,25 | 11.3,14 | 14,17 | 12,13 |  |
| 3 | 7,11 | 13,13 | 14,14 | 18,19 | 9,9 | 10,12 |
|  | 13,14 | 13,16 | 31.2,31.2 | 15,17 | X,Y | 10,11 |
|  | 20,23 |  |  | 16,17 | 7,9,3 | 8,11 |
|  | 17,17 | 10 |  |  | 2 |  |

TABLE 1

| WebCode | 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

|         |                           |            |            |            |       |            |
|---------|---------------------------|------------|------------|------------|-------|------------|
| YRVV3K  | GlobalFiler™ (STRmix)     |            |            |            |       |            |
|         | 15,15.3                   | 20,25      | 11.3,14    | 14,17      | 12,13 |            |
| 3       | 7,11                      | 13         | 14         | 18,19      | 9     | 10,12      |
|         | 13,14                     | 13,16      | 31.2       | 15,17      | X,Y   | 10,11      |
|         | 20,23                     |            |            | 16,17      | 7,9,3 | 8,11       |
|         | 17                        | 10         |            |            | 2     |            |
| YR XMZR | PowerPlex® Fusion         |            |            |            |       |            |
|         | 15,15.3                   | 20,25      | 11.3,14    | 14,17      | 12,13 |            |
| 3       | 7,11                      | 13         | 14         | 18,19      | 9     | 10,12      |
|         | 13,14                     | 13,16      | 31.2       | 15,17      | X,Y   | 10,11      |
|         | 20,23                     | 9,13       | 12,13      |            | 7,9,3 | 8,11       |
|         | 17                        | 10         |            |            |       |            |
| ZARTPX  | PowerPlex® Fusion 6C      |            |            |            |       |            |
|         | 15,15.3                   | 20,25      | 11.3,14    | 14,17      | 12,13 |            |
| 3       | 7,11                      | 13         | 14         | 18,19      | 9     | 10,12      |
|         | 13,14                     | 13,16      | 31.2       | 15,17      | X,Y   | 10,11      |
|         | 20,23                     | 9,13       | 12,13      | 16,17      | 7,9,3 | 8,11       |
|         | 17                        | 10         | 19         | 20         |       |            |
| ZAUM94  | PowerPlex® Fusion         |            |            |            |       |            |
|         | 15,15.3                   | 20,25      | 11.3,14    | 14,17      | 12,13 |            |
| 3       | 7,11                      | 13,13      | 14,14      | 18,19      | 9,9   | 10,12      |
|         | 13,14                     | 13,16      | 31.2,31.2  | 15,17      | X,Y   | 10,11      |
|         | 20,23                     | 9,13       | 12,13      |            | 7,9,3 | 8,11       |
|         | 17,17                     | 10         |            |            |       |            |
| ZEH8BY  | GlobalFiler™              |            |            |            |       |            |
|         | 15,15.3                   | 20,25      | 11.3,14    | 14,17      | 12,13 | Not Tested |
| 3       | 7,11                      | 13,13      | 14,14      | 18,19      | 9,9   | 10,12      |
|         | 13,14                     | 13,16      | 31.2,31.2  | 15,17      | X,Y   | 10,11      |
|         | 20,23                     | Not Tested | Not Tested | 16,17      | 7,9,3 | 8,11       |
|         | 17,17                     | 10         | Not Tested | Not Tested | 2     |            |
| ZKAHKW  | GlobalFiler™ (TrueAllele) |            |            |            |       |            |
|         | 15,15.3                   | 20,25      | 11.3,14    | 14,17      | 12,13 |            |
| 3       | 7,11                      | 13         | 14         | 18,19      | 9     | 10,12      |
|         | 13,14                     | 13,16      | 31.2       | 15,17      | X,Y   | 10,11      |
|         | 20,23                     |            |            | 16,17      | 7,9,3 | 8,11       |
|         | 17                        | 10         |            |            | 2     |            |
| ZWHZEL  | GlobalFiler™              |            |            |            |       |            |
|         | 15,15.3                   | 20,25      | 11.3,14    | 14,17      | 12,13 |            |
| 3       | 7,11                      | 13         | 14         | 18,19      | 9     | 10,12      |
|         | 13,14                     | 13,16      | 31.2       | 15,17      | X,Y   | 10,11      |
|         | 20,23                     |            |            | 16,17      | 7,9,3 | 8,11       |
|         | 17                        | 10         |            |            | 2     |            |

TABLE 1

| WebCode | 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

|        |                      |       |           |       |       |       |
|--------|----------------------|-------|-----------|-------|-------|-------|
| ZYA44L | PowerPlex® Fusion 6C |       |           |       |       |       |
|        | 15,15.3              | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3      | 7,11                 | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14                | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23                | 9,13  | 12,13     | 16,17 | 7,9.3 | 8,11  |
|        | 17,17                | 10    | 19        | 20    |       |       |

TABLE 1

| WebCode | 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**

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|        |              |       |           |       |       |       |
|--------|--------------|-------|-----------|-------|-------|-------|
| 3PGKN4 | GlobalFiler™ |       |           |       |       |       |
|        | 15,15.3      | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3e     | 7,11         | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14        | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23        |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17        | 10    |           |       | 2     |       |

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|        |              |       |           |       |       |       |
|--------|--------------|-------|-----------|-------|-------|-------|
| 7HYN3D | GlobalFiler™ |       |           |       |       |       |
|        | 15,15.3      | 20,25 | 11.3,14   | 14,17 | 12,13 | --    |
| 3e     | 7,11         | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14        | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23        | --    | --        | 16,17 | 7,9,3 | 8,11  |
|        | 17,17        | 10    | --        | --    | 2     |       |

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|        |              |       |           |       |       |       |
|--------|--------------|-------|-----------|-------|-------|-------|
| MUF32W | GlobalFiler™ |       |           |       |       |       |
|        | 15,15.3      | 20,25 | 11.3,14   | 14,17 | 12,13 |       |
| 3e     | 7,11         | 13,13 | 14,14     | 18,19 | 9,9   | 10,12 |
|        | 13,14        | 13,16 | 31.2,31.2 | 15,17 | X,Y   | 10,11 |
|        | 20,23        |       |           | 16,17 | 7,9,3 | 8,11  |
|        | 17,17        | 10    |           |       | 2     |       |

TABLE 1

| WebCode | 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

3PGKN4 GlobalFiler™

3sp



7HYN3D GlobalFiler™

3sp



MUF32W GlobalFiler™

3sp

|                     |          |           |          |            |            |
|---------------------|----------|-----------|----------|------------|------------|
| [14],15,15.3,[16.3] | 20,25    | 11.3,14   | 14,16,17 | [11],12,13 |            |
| 7,11                | 13       | 13,14     | 18,19    | 9,[11]     | 10,[11],12 |
| 13,14,[17]          | 13,15,16 | [30],31.2 | 15,16,17 | X,Y        | 10,11      |
| 20,23               |          |           | 16,17    | 7,9,3      | 8,11       |
| 17                  | 10,11    |           |          | 2          |            |

TABLE 1

| WebCode | 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**

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| 7VRGN3 | GlobalFiler™ |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4 | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 |  |  | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 |  |  | 2 |  |
| LH89HM | PowerPlex® ESX17 |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 |  |  |
| 4 |  | 10,13,14 | 13,14,16 | 17,18,21 |  | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y |  |
|  | 20,21,22 |  |  | 19,24.2,29.2 | 6,7,9,9.3 |  |
|  | 14,17 |  |  |  |  |  |
| VHXLXC | NGM SElect |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 |  |  |
| 4 |  | 10,13,14 | 13,14,16 | 17,18,21 |  | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y |  |
|  | 20,21,22 |  |  | 19,24.2,29.2 | 6,7,9,9.3 |  |
|  | 14,17 |  |  |  |  |  |
| WHRQRC | PowerPlex® ESI17 |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 |  |  |
| 4 |  | 10,13,14 | 13,14,16 | 17,18,21 |  | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y |  |
|  | 20,21,22 |  |  | 19,24.2,29.2 | 6,7,9,9.3 |  |
|  | 14,17 |  |  |  |  |  |
| WWE77P | PowerPlex® Fusion 6C (STRmix) |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4 | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 | 9,12,14 | 5,10,14 | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 | 17 | 19 |  |  |

TABLE 1

| WebCode | 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         |                |
|         | <b>Item 4e - STR Results</b>                           |                 |              |                 |                 |                |
| 2JRNH2  | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              | 17           | 19              |                 |                |
| 2TUB6R  | GlobalFiler™ (STRmix)                                  |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |              |                 | 2               |                |
| 2VNYNN  | GlobalFiler™   |                 |              |                 |                 |                |
|         | (14),16,(16.3),18.3                                    | (17),21,24,26   | 11,12,(14)   | 15,(16),17,(18) | 11,12           |                |
| 4e      | (9),10,10,(11)   | 10,13,14        | (13),14,16   | 17,(18),21      | (11),13,13,(14) | 9,(11,12),14   |
|         | 13,16,(17)   | 13,15,(16.2)    | 30,31,32.2   | 15,15,(16)      | X,X,(Y)         | 10,11,(12)     |
|         | 20,21,(22)   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |              |                 | 2               |                |
| 38ZG4X  | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|         | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e      | [9],10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|         | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|         | 20,21,[22]   | 9,[12],[14]     | 5,10,[14]    | 19,24.2,[29.2]  | 6,7,[9],[9.3]   | 8,11           |
|         | 14,17  | 11              | 17           | 19              |                 |                |
| 3BW84H  | GlobalFiler™   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |              |                 | 2               |                |
| 3DZ6CP  | GlobalFiler™   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |              |                 | 2               |                |
| 3EY27T  | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              | 17           | 19              |                 |                |

TABLE 1

| WebCode               | 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 |  |                 |              |                 |              |                |
| 3NYTCY                | GlobalFiler™ (STRmix)                                  |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |
| 3PGKN4                | GlobalFiler™   |                 |              |                 |              |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12        |                |
| 4e                    | [9],10,[11]  | 10,13,14        | 13,14,16     | 17,18,21        | [11],13,[14] | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | 30,31,32.2   | 15,16           | X,[Y]        | 10,11,[12]     |
|                       | 20,21,[22]   |                 |              | 19,24.2,29.2    | 6,7,[9],9.3  | 8,11           |
|                       | 14,17  | [11]            |              |                 | [2]          |                |
| 4EQNTG                | GlobalFiler™   |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |
| 4GD3HQ                | PowerPlex® Fusion                                      |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14      |                 | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 |              |                |
| 4NEG6D                | GlobalFiler™   |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |
| 4X46XU                | GlobalFiler™   |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |
| 4YWYXK                | GlobalFiler™   |                 |              |                 |              |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12        |                |
| 4e                    | [9],10   | 10,[13],14      | [13],14,16   | 17,[18],21      | 13           | 9,[11],14      |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]        | 10,11          |
|                       | 20,21  |                 |              | 19,24.2,[29.2]  | 6,7,[9,9.3]  | 8,11           |
|                       | 14,17  | [11]            |              |                 | [2]          |                |

TABLE 1

| WebCode               | 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 |  |                 |              |                 |              |                |
| 66H4ER                | PowerPlex® Fusion 6C (STRmix)                          |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |              |                |
| 66J9KM                | GlobalFiler™   |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |
| 69HFAR                | PowerPlex® Fusion 6C (STRmix)                          |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |              |                |
| 69HJGM                | GlobalFiler™   |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |
| 6JJRHE                | GlobalFiler™ (STRmix)                                  |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |
| 6K9DTG                | GlobalFiler™   |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |
| 6YP97R                | PowerPlex® Fusion 6C                                   |                 |              |                 |              |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12        |                |
| 4e                    | [9],10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14] | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]        | 10,11,[12]     |
|                       | 20,21,[22]   | 9,[12],14       | 5,10,[14]    | 19,24.2,[29.2]  | 6,7,[9],9.3  | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |              |                |

TABLE 1

| WebCode | 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         |                |
|         | <b>Item 4e - STR Results</b>                           |                 |              |                 |                 |                |
| 7A93XE  | PowerPlex® Fusion 6C (STRmix)                          |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9.3         | 8,11           |
|         | 14,17  | 11              | 17           | 19              |                 |                |
| 7HHCMT  | GlobalFiler™   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10   | 10,13,14        | 13,14,16     | 17,18,21        | 13              | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |              |                 | 2               |                |
| 7HYN3D  | GlobalFiler™   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           | --             |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   | --              | --           | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              | --           | --              | 2               |                |
| 7KLAUF  | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              | 17           | 19              |                 |                |
| 7KM3RM  | GlobalFiler™   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |              |                 | 2               |                |
| 7NUB3T  | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|         | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e      | [9],10,10,[11]   | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,13,[14] | 9,[11],[12],14 |
|         | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,15           | X,X,[Y]         | 10,11,[12]     |
|         | 20,21,[22]   | 9,9,[12],[14]   | 5,10,[14]    | 19,24.2,[29.2]  | 6,7,[9],9.3     | 8,11           |
|         | 14,17  | [11]            | [17]         | [19]            |                 |                |
| 7QE6YT  | GlobalFiler™   |                 |              |                 |                 |                |
|         | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e      | [9],10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|         | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|         | 20,[21],[22]   |                 |              | 19,24.2,[29.2]  | 6,7,[9],9.3     | 8,11           |
|         | 14,17  | 11              |              |                 | 2               |                |

TABLE 1

| WebCode | 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**

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| 7RQ4RG | GlobalFiler™ |  |  |  |  |  |
|  | [14],16,[16.3],18.3 | [17],21,[24],26 | 11,12 | 15,[16],17,[18] | 11,12 |  |
| 4e | [9],10 | 10,[13],14 | [13],14,16 | 17,21 | 13 | 9,14 |
|  | 13,16,[17] | 13,15 | 30,31,32.2 | 15,[16] | X,[Y] | 10,11 |
|  | 20,21 |  |  | 19,24.2 | 6,7,[9,9.3] | 8,11 |
|  | 14,17 | [11] |  |  | [2] |  |
| 7RRYFT | GlobalFiler™ |  |  |  |  |  |
|  | [14],16,[16.3],18.3 | [17],21,[24],26 | 11,12,[14] | 15,[16],17,[18] | 11,12 |  |
| 4e | [9],10,[11] | 10,[13],14 | [13],14,16 | 17,[18],21 | [11],13,[14] | 9,[11],[12],14 |
|  | 13,16,[17] | 13,15,[16.2] | [30],31,32.2 | 15,[16] | X,[Y] | 10,11,[12] |
|  | 20,21,[22] |  |  | 19,24.2,[29.2] | 6,7,[9],[9.3] | 8,11 |
|  | 14,17 | 11 |  |  | 2 |  |
| 8CTDAP | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | [14],16,[16.3],18.3 | [17],21,[24],26 | 11,12,[14] | 15,[16],17,[18] | 11,12 |  |
| 4e | [9],10,[11] | 10,[13],14 | [13],14,16 | 17,[18],21 | [11],13,[14] | 9,[11],[12],14 |
|  | 13,16,[17] | 13,15,[16.2] | [30],31,32.2 | 15,[16] | X,[Y] | 10,11,[12] |
|  | 20,21,[22] | 9,[12],[14] | 5,10 | 19,24.2,[29.2] | 6,7,[9],[9.3] | 8,11 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| 8DQFJN | PowerPlex® Fusion 6C (STRmix) |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 | 9,12,14 | 5,10,14 | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| 8HF27G | GlobalFiler™ |  |  |  |  |  |
|  | [14],16,[16.3],18.3 | [17],21,[24],26 | 11,12,[14] | 15,[16],17,[18] | 11,12 |  |
| 4e | [9],10,[11] | 10,[13],14 | [13],14,16 | 17,[18],21 | [11],13,[14] | 9,[11],[12],14 |
|  | 13,16,[17] | 13,15,[16.2] | [30],31,32.2 | 15,[16] | X,[Y] | 10,11,[12] |
|  | 20,21,[22] |  |  | 19,24.2,[29.2] | 6,7,[9],[9.3] | 8,11 |
|  | 14,17 | [11] |  |  | [2] |  |
| 8KJYFN | GlobalFiler™ |  |  |  |  |  |
|  | [14],16,[16.3],18.3 | [17],21,[24],26 | 11,12,[14] | 15,[16],17,[18] | 11,12 |  |
| 4e | [9],10,[11] | 10,[13],14 | [13],14,16 | 17,[18],21 | [11],13,[14] | 9,[11],[12],14 |
|  | 13,16,[17] | 13,15,[16.2] | [30],31,32.2 | 15,[16] | X,[Y] | 10,11,[12] |
|  | 20,21,[22] |  |  | 19,24.2,[29.2] | 6,7,[9],[9.3] | 8,[11] |
|  | 14,17 | 11 |  |  | 2 |  |
| 96QUX2 | Identifier® Plus |  |  |  |  |  |
|  |  | 17,21,24,26 |  | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 |  |  | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 |  | X,Y | 10,11,12 |
|  | 20,21,22 |  |  |  | 6,7,9,9.3 | 8,11 |
|  | 14,17 |  |  |  |  |  |

TABLE 1

| WebCode | 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         |                |
|         | <b>Item 4e - STR Results</b>                           |                 |              |                 |                 |                |
| 97JFFC  | GlobalFiler™   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |              |                 | 2               |                |
| 9DG8LK  | GlobalFiler™   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |              |                 | 2               |                |
| 9LAHWF  | GlobalFiler™   |                 |              |                 |                 |                |
|         | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e      | [9],10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|         | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|         | 20,21,[22]   |                 |              | 19,24.2,[29.2]  | 6,7,[9],[9.3]   | 8,11           |
|         | 14,17  | [11]            |              |                 | [2]             |                |
| 9NXWKP  | Identifier® Plus                                       |                 |              |                 |                 |                |
|         |  | 17,21,24,26     |              | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        |              |                 | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   |                 | X,Y             | 10,11,12       |
|         | 20,21,22   |                 |              |                 | 6,7,9,9.3       | 8,11           |
|         | 14,17  |                 |              |                 |                 |                |
| 9PWWNV  | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              | 17           | 19              |                 |                |
| 9QAJ6P  | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              | 17           | 19              |                 |                |
| 9V3NTM  | GlobalFiler™   |                 |              |                 |                 |                |
|         | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e      | [9],10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|         | 13,16,[17]   | [13],15,[16.2]  | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|         | 20,21,[22]   |                 |              | 19,24.2,[29.2]  | [6],7,[9],[9.3] | 8,[11]         |
|         | 14,17  | 11              |              |                 | 2               |                |

TABLE 1

| WebCode               | 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 |  |                 |              |                 |                 |                |
| 9ZEG6L                | GlobalFiler™   |                 |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              |              |                 | 2               |                |
| A6LKEK                | PowerPlex® Fusion 6C (STRmix)                          |                 |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |                 |                |
| A86L98                | PowerPlex® Fusion 6C (STRMix)                          |                 |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |                 |                |
| A9Z4B9                | GlobalFiler™ (STRmix)                                  |                 |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              |              |                 | 2               |                |
| ADY9CT                | PowerPlex® Fusion                                      |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | [9],10,10,[11]   | 10,13,14        | 13,14,16     | 17,[18],21      | [11],13,13,[14] | 9,[11,12],14   |
|                       | 13,16,[17]   | 13,15,[16.2]    | 30,31,32.2   | 15,15,[16]      | X,X,[Y]         | 10,11,[12]     |
|                       | 20,21,[22]   | 9,9,[12,14]     | 5,10,[14]    |                 | 6,7,[9,9.3]     | 8,11           |
|                       | 14,17  | 11              |              |                 |                 |                |
| AF3DJL                | Investigator® 24plex                                   |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | 10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|                       | 20,21,[22]   |                 |              | 19,24.2,[29.2]  | 6,7,[9],9.3]    | 8,11           |
|                       | 14,17  | 11              |              |                 |                 |                |
| AGXWKM                | Investigator® 24plex                                   |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | 10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,15           | X,[Y]           | 10,11,[12]     |
|                       | 20,21,[22]   |                 |              | 19,24.2,[29.2]  | 6,7,[9],9.3]    | 8,11           |
|                       | 14,17  | 11              |              |                 |                 |                |

TABLE 1

| <b>WebCode Amplification Kits (Probabilistic Genotyping Software)</b> |                            |                 |                 |                 |                   |                |
|---|----------------------------|-----------------|-----------------|-----------------|-------------------|----------------|
| <b>Item</b>   | <b>D1S1656</b>             | <b>D2S1338</b>  | <b>D2S441</b>   | <b>D3S1358</b>  | <b>D5S818</b>     | <b>D6S1043</b> |
|   | <b>D7S820</b>              | <b>D8S1179</b>  | <b>D10S1248</b> | <b>D12S391</b>  | <b>D13S317</b>    | <b>D16S539</b> |
|   | <b>D18S51</b>              | <b>D19S433</b>  | <b>D21S11</b>   | <b>D22S1045</b> | <b>Amelogenin</b> | <b>CSF1PO</b>  |
|   | <b>FGA</b>                 | <b>Penta D</b>  | <b>Penta E</b>  | <b>SE33</b>     | <b>TH01</b>       | <b>TPOX</b>    |
|   | <b>vWA</b>                 | <b>DYS391</b>   | <b>DYS570</b>   | <b>DYS576</b>   | <b>Y Indel</b>    |                |
| <b>Item 4e - STR Results</b>  |                            |                 |                 |                 |                   |                |
| AJ2MUN  | GlobalFiler™               |                 |                 |                 |                   |                |
|   | [14],16,[16.3],18.3        | [17],21,[24],26 | 11,12,[14]      | 15,[16],17,[18] | 11,12             |                |
| 4e  | [9],10,[11]                | 10,[13],14      | [13],14,16      | 17,[18],21      | [11],13,[14]      | 9,[11],[12],14 |
|   | 13,16,[17]                 | 13,15,[16.2]    | [30],31,32.2    | 15,[16]         | X,[Y]             | 10,11,[12]     |
|   | 20,21,[22]                 |                 |                 | 19,24.2,[29.2]  | 6,7,9,[9.3]       | 8,11           |
|   | 14,17                      | 11              |                 |                 | 2                 |                |
| APBNBL  | PowerPlex® Fusion          |                 |                 |                 |                   |                |
|   | 14,16,16.3,18.3            | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12             |                |
| 4e  | 9,10,11                    | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14          | 9,11,12,14     |
|   | 13,16,17                   | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y               | 10,11,12       |
|   | 20,21,22                   | 9,12,14         | 5,10,14         |                 | 6,7,9,9.3         | 8,11           |
|   | 14,17                      | 11              |                 |                 |                   |                |
| ATNQTB  | PowerPlex® Fusion 6C       |                 |                 |                 |                   |                |
|   | 14,16,16.3,18.3            | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12             |                |
| 4e  | 9,10,11                    | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14          | 9,11,12,14     |
|   | 13,16,17                   | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y               | 10,11,12       |
|   | 20,21,22                   | 9,12,14         | 5,10,14         | 19,24.2,29.2    | 6,7,9,9.3         | 8,11           |
|   | 14,17                      | 11              | 17              | 19              |                   |                |
| AZB8WL  | PowerPlex® Fusion 6C       |                 |                 |                 |                   |                |
|   | 14,16,16.3,18.3            | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12             |                |
| 4e  | 9,10,11                    | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14          | 9,11,12,14     |
|   | 13,16,17                   | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y               | 10,11,12       |
|   | 20,21,22                   | 9,12,14         | 5,10,14         | 19,24.2,29.2    | 6,7,9,9.3         | 8,11           |
|   | 14,17                      | 11              | 17              | 19              |                   |                |
| B6LNKG  | PowerPlex® Fusion          |                 |                 |                 |                   |                |
|   | 14,16,16.3,18.3            | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12             |                |
| 4e  | 9,10,11                    | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14          | 9,11,12,14     |
|   | 13,16,17                   | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y               | 10,11,12       |
|   | 20,21,22                   | 9,12,14         | 5,10,14         |                 | 6,7,9,9.3         | 8,11           |
|   | 14,17                      | 11              |                 |                 |                   |                |
| B6Y9DQ  | GlobalFiler™ (STRmix v2.7) |                 |                 |                 |                   |                |
|   | 14,16,16.3,18.3            | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12             |                |
| 4e  | 10,11                      | 10,13,14        | 13,14,16        | 17,21           | 11,13,14          | 9,11,12,14     |
|   | 13,16,17                   | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y               | 10,11,12       |
|   | 20,21,22                   |                 |                 | 19,24.2,29.2    | 6,7,9,9.3         | 8,11           |
|   | 14,17                      | 11              |                 |                 | 2                 |                |
| B6ZBXP  | PowerPlex® 6C              |                 |                 |                 |                   |                |
|   | [14],16,[16.3],18.3        | [17],21,[24],26 | 11,12,[14]      | 15,[16],17,[18] | 11,12             |                |
| 4e  | [9],10,[11]                | 10,[13],14      | [13],14,16      | 17,[18],21      | [11],13,[14]      | 9,[11],[12],14 |
|   | 13,16,[17]                 | 13,15,[16.2]    | [30],31,32.2    | 15,15           | X,[Y]             | 10,11,[12]     |
|   | 20,21,[22]                 | 9,[12],14       | 5,10,[14]       | 19,24.2,[29.2]  | 6,7,[9],9.3       | 8,[11]         |
|   | 14,17                      | 11              | 17              | 19              |                   |                |

TABLE 1

| WebCode | 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

|        |                                     |             |            |              |           |            |
|--------|-------------------------------------|-------------|------------|--------------|-----------|------------|
| BB6A8T | PowerPlex® Fusion 6C                |             |            |              |           |            |
|        | 14,16,16.3,18.3                     | 17,21,24,26 | 11,12,14   | 15,16,17,18  | 11,12     |            |
| 4e     | 9,10,11                             | 10,13,14    | 13,14,16   | 17,18,21     | 11,13,14  | 9,11,12,14 |
|        | 13,16,17                            | 13,15,16.2  | 30,31,32.2 | 15,16        | X,Y       | 10,11,12   |
|        | 20,21,22                            | 9,12,14     | 5,10,14    | 19,24.2,29.2 | 6,7,9,9.3 | 8,11       |
|        | 14,17                               | 11          | 17         | 19           |           |            |
| BVBMYF | PowerPlex® Fusion                   |             |            |              |           |            |
|        | 14,16,16.3,18.3                     | 17,21,24,26 | 11,12,14   | 15,16,17,18  | 11,12     |            |
| 4e     | 9,10,11                             | 10,13,14    | 13,14,16   | 17,18,21     | 11,13,14  | 9,11,12,14 |
|        | 13,16,17                            | 13,15,16.2  | 30,31,32.2 | 15,16        | X,Y       | 10,11,12   |
|        | 20,21,22                            | 9,12,14     | 5,10,14    |              | 6,7,9,9.3 | 8,11       |
|        | 14,17                               | 11          |            |              |           |            |
| BWBHTK | PowerPlex® Fusion 6C (STRmix)       |             |            |              |           |            |
|        | 14,16,16.3,18.3                     | 17,21,24,26 | 11,12,14   | 15,16,17,18  | 11,12     |            |
| 4e     | 9,10,11                             | 10,13,14    | 13,14,16   | 17,18,21     | 11,13,14  | 9,11,12,14 |
|        | 13,16,17                            | 13,15,16.2  | 30,31,32.2 | 15,16        | X,Y       | 10,11,12   |
|        | 20,21,22                            | 9,12,14     | 5,10,14    | 19,24.2,29.2 | 6,7,9,9.3 | 8,11       |
|        | 14,17                               | 11          | 17         | 19           |           |            |
| BYBTHR | PowerPlex® Fusion 6C                |             |            |              |           |            |
|        | 14,16,16.3,18.3                     | 17,21,24,26 | 11,12,14   | 15,16,17,18  | 11,12     |            |
| 4e     | 9,10,11                             | 10,13,14    | 13,14,16   | 17,18,21     | 11,13,14  | 9,11,12,14 |
|        | 13,16,17                            | 13,15,16.2  | 30,31,32.2 | 15,16        | X,Y       | 10,11,12   |
|        | 20,21,22                            | 9,12,14     | 5,10,14    | 19,24.2,29.2 | 6,7,9,9.3 | 8,11       |
|        | 14,17                               | 11          | 17         | 19           |           |            |
| BYUJM7 | PowerPlex® Fusion 6C (STRmix 2.6.3) |             |            |              |           |            |
|        | 14,16,16.3,18.3                     | 17,21,24,26 | 11,12,14   | 15,16,17,18  | 11,12     |            |
| 4e     | 9,10,11                             | 10,13,14    | 13,14,16   | 17,18,21     | 11,13,14  | 9,11,12,14 |
|        | 13,16,17                            | 13,15,16.2  | 30,31,32.2 | 15,16        | X,Y       | 10,11,12   |
|        | 20,21,22                            | 9,12,14     | 5,10,14    | 19,24.2,29.2 | 6,7,9,9.3 | 8,11       |
|        | 14,17                               | 11          | 17         | 19           |           |            |
| C3NZD6 | PowerPlex® Fusion 6C                |             |            |              |           |            |
|        | 14,16,16.3,18.3                     | 17,21,24,26 | 11,12,14   | 15,16,17,18  | 11,12     |            |
| 4e     | 9,10,11                             | 10,13,14    | 13,14,16   | 17,18,21     | 11,13,14  | 9,11,12,14 |
|        | 13,16,17                            | 13,15,16.2  | 30,31,32.2 | 15,16        | X,Y       | 10,11,12   |
|        | 20,21,22                            | 9,12,14     | 5,10,14    | 19,24.2,29.2 | 6,7,9,9.3 | 8,11       |
|        | 14,17                               | 11          | 17         | 19           |           |            |
| C4JHE7 | GlobalFiler™ (STRmix)               |             |            |              |           |            |
|        | 14,16,16.3,18.3                     | 17,21,24,26 | 11,12,14   | 15,16,17,18  | 11,12     |            |
| 4e     | 9,10,11                             | 10,13,14    | 13,14,16   | 17,18,21     | 11,13,14  | 9,11,12,14 |
|        | 13,16,17                            | 13,15,16.2  | 30,31,32.2 | 15,16        | X,Y       | 10,11,12   |
|        | 20,21,22                            |             |            | 19,24.2,29.2 | 6,7,9,9.3 | 8,11       |
|        | 14,17                               | 11          |            |              |           |            |
|        |                                     |             |            |              | 2         |            |

TABLE 1

| WebCode               | 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 |  |                 |              |                 |                 |                |
| CYRCXJ                | GlobalFiler™   |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | [9],10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|                       | 20,21,[22]   |                 |              | 19,24.2,[29.2]  | 6,7,[9],9.3     | 8,[11]         |
|                       | 14,17  | 11              |              |                 | 2               |                |
| D8JYDL                | GlobalFiler™ (STRmix)                                  |                 |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              |              |                 | 2               |                |
| DHVD89                | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |                 |                |
| DK4N4C                | GlobalFiler™   |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | 17,21,[24],26   | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | [9],10,10,[11]   | 10,13,14        | [13],14,16   | 17,[18],21      | [11],13,13,[14] | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | 30,31,32.2   | 15,15,[16]      | X,X,[Y]         | 10,11,[12]     |
|                       | 20,21,[22]   |                 |              | 19,24.2,[29.2]  | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              |              |                 | 2               |                |
| EHT7HK                | Identifier® Plus                                       |                 |              |                 |                 |                |
|                       |  | 17,21,24,26     |              | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        |              |                 | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   |                 | X,Y             | 10,11,12       |
|                       | 20,21,22   |                 |              |                 | 6,7,9,9.3       | 8,11           |
|                       | 14,17  |                 |              |                 |                 |                |
| EM9GT4                | GlobalFiler™ (STRmix)                                  |                 |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              |              |                 | 2               |                |
| EPD3PG                | Investigator® 24plex                                   |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | 10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|                       | 20,21,[22]   | Not Tested      | Not Tested   | 19,24.2,[29.2]  | 6,7,[9],9.3     | 8,11           |
|                       | 14,17  | 11              |              |                 |                 |                |

TABLE 1

| WebCode               | 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 |  |                 |                 |                 |               |                |
| EQQN4P                | PowerPlex® Fusion                                      |                 |                 |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,30,[31,32.2] | 15,16           | X,X,[Y]       | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14         |                 | 6,7,9,9.3     | 8,8,[11]       |
|                       | 14,17  | 11              |                 |                 |               |                |
| EU74PA                | GlobalFiler™   |                 |                 |                 |               |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,14        | 15,16,17,18     | 11,12         |                |
| 4e                    | [9],10,[11]  | 10,13,14        | 13,14,16        | 17,[18],21      | [11],13,[14]  | 9,[11,12],14   |
|                       | 13,16,[17]   | 13,15,16.2      | 30,31,32.2      | 15,[16]         | X,[Y]         | 10,11,[12]     |
|                       | 20,21,22   |                 |                 | 19,24.2,29.2    | 6,7,[9,9.3]   | 8,11           |
|                       | 14,17  | [11]            |                 |                 | [2]           |                |
| EVH3JJ                | GlobalFiler™   |                 |                 |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10   | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   |                 |                 | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11              |                 |                 | 2             |                |
| EW DLLK               | GlobalFiler™   |                 |                 |                 |               |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]      | 15,[16],17,[18] | 11,12         |                |
| 4e                    | [9],10,[11]  | 10,[13],14      | [13],14,16      | 17,[18],21      | [11],13,[14]  | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2    | 15,[16]         | X,[Y]         | 10,11,[12]     |
|                       | 20,21,[22]   |                 |                 | 19,24.2,[29.2]  | 6,7,[9],[9.3] | 8,11           |
|                       | 14,17  | 11              |                 |                 | 2             |                |
| EWUHDK                | GlobalFiler™   |                 |                 |                 |               |                |
|                       | 16,18.3  | 21,26           | 11,12           | 15,17           | 11,12         |                |
| 4e                    | 10,10  | 10,14           | 14,16           | 17,21           | 13,13         | 9,14           |
|                       | 13,16  | 13,15           | 31,32.2         | 15,15           | X,X           | 10,11          |
|                       | 20,21  |                 |                 | 19,24.2         | 6,7           | 8,11           |
|                       | 14,17  |                 |                 |                 |               |                |
| F3X4G8                | GlobalFiler™ IQC (LRmixstudio-2.1.3)                   |                 |                 |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,31.2      | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   |                 |                 | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11              |                 |                 | 2             |                |
| FB9639                | PowerPlex® Fusion 6C, GlobalFiler™                     |                 |                 |                 |               |                |
|                       | (14),16,(16.3),18.3                                    | (17),21,(24),26 | 11,12,(14)      | 15,(16),17,(18) | 11,12         |                |
| 4e                    | (9),10,(11)  | 10,(13),14      | (13),14,16      | 17,(18),21      | (11),13,(14)  | 9,(11),(12),14 |
|                       | 13,16,(17)   | 13,15,(16.2)    | (30),31,32.2    | 15,(16)         | X,X,(X,Y)     | 10,11,(12)     |
|                       | 20,21,(22)   | 9,(12),(14)     | 5,10,(14)       | 19,24.2,(29.2)  | 6,7,(9),(9.3) | 8,11           |
|                       | 14,17  | 11              | 17              | 19              | 2             |                |

TABLE 1

| WebCode | 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

|        |                               |                 |            |                 |              |            |
|--------|-------------------------------|-----------------|------------|-----------------|--------------|------------|
| FCJ62N | PowerPlex® Fusion 6C          |                 |            |                 |              |            |
|        | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14   | 15,16,17,18     | 11,12        |            |
| 4e     | 9,10,11                       | 10,13,14        | 13,14,16   | 17,18,21        | 11,13,14     | 9,11,12,14 |
|        | 13,16,17                      | 13,15,16.2      | 30,31,32.2 | 15,16           | X,Y          | 10,11,12   |
|        | 20,21,22                      | 9,12,14         | 5,10,14    | 19,24.2,29.2    | 6,7,9,9.3    | 8,11       |
|        | 14,17                         | 11              | 17         | 19              |              |            |
| FFHGWN | PowerPlex® Fusion 6C          |                 |            |                 |              |            |
|        | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14   | 15,16,17,18     | 11,12        |            |
| 4e     | 9,10,11                       | 10,13,14        | 13,14,16   | 17,18,21        | 11,13,14     | 9,11,12,14 |
|        | 13,16,17                      | 13,15,16.2      | 30,31,32.2 | 15,16           | X,Y          | 10,11,12   |
|        | 20,21,22                      | 9,12,14         | 5,10,14    | 19,24.2,29.2    | 6,7,9,9.3    | 8,11       |
|        | 14,17                         | 11              | 17         | 19              |              |            |
| FQLUXN | PowerPlex® Fusion             |                 |            |                 |              |            |
|        | [14],16,16.3,18.3             | 17,21,24,26     | 11,12,14   | 15,16,17,18     | 11,12        |            |
| 4e     | [9],10,10,[11]                | 10,13,14        | 13,14,16   | 17,18,21        | [11],13,13   | 9,11,12,14 |
|        | 13,16,17                      | 13,15,[16.2]    | 30,31,32.2 | 15,15           | X,Y          | 10,11,12   |
|        | 20,21,[22]                    | 9,9             | 5,10       |                 | 6,7,9,9.3    | 8,8,[11]   |
|        | 14,17                         | NR              |            |                 |              |            |
| G7B4CD | PowerPlex® Fusion             |                 |            |                 |              |            |
|        | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14   | 15,16,17,18     | 11,12        |            |
| 4e     | 9,10,11                       | 10,13,14        | 13,14,16   | 17,18,21        | 11,13,14     | 9,11,12,14 |
|        | 13,16,17                      | 13,15,16.2      | 30,31,32.2 | 15,16           | X,Y          | 10,11,12   |
|        | 20,21,22                      | 9,12,14         | 5,10,14    |                 | 6,7,9,9.3    | 8,11       |
|        | 14,17                         | 11              |            |                 |              |            |
| G8BY6H | PowerPlex® Fusion 6C (STRmix) |                 |            |                 |              |            |
|        | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14   | 15,16,17,18     | 11,12        |            |
| 4e     | 9,10,11                       | 10,13,14        | 13,14,16   | 17,18,21        | 11,13,14     | 9,11,12,14 |
|        | 13,16,17                      | 13,15,16.2      | 30,31,32.2 | 15,16           | X,Y          | 10,11,12   |
|        | 20,21,22                      | 9,12,14         | 5,10,14    | 19,24.2,29.2    | 6,7,9,9.3    | 8,11       |
|        | 14,17                         | 11              | 17         | 19              |              |            |
| GHP2H3 | PowerPlex® Fusion 5C          |                 |            |                 |              |            |
|        | (14,)16,(16.3,)18.3           | (17,)21,(24,)26 | 11,12,(14) | 15,(16,)17,(18) | 11,12        |            |
| 4e     | (9,)10,(11)                   | 10,(13,)14      | (13,)14,16 | 17,(18,)21      | (11,)13,(14) | 9,11,12,14 |
|        | 13,16,(17)                    | 13,15,(16.2)    | 30,31,32.2 | 15,(16)         | X,(Y)        | 10,11,(12) |
|        | 20,21,(22)                    | 9,(12,14)       | 5,10,(14)  |                 | 6,7,(9,9.3)  | 8,11       |
|        | 14,17                         | 11              |            |                 |              |            |
| GJZ8F4 | PowerPlex® Fusion 6C          |                 |            |                 |              |            |
|        | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14   | 15,16,17,18     | 11,12        |            |
| 4e     | 9,10,11                       | 10,13,14        | 13,14,16   | 17,18,21        | 11,13,14     | 9,11,12,14 |
|        | 13,16,17                      | 13,15,16.2      | 30,31,32.2 | 15,16           | X,Y          | 10,11,12   |
|        | 20,21,22                      | 9,12,14         | 5,10,14    | 19,24.2,29.2    | 6,7,9,9.3    | 8,11       |
|        | 14,17                         | 11              | 17         | 19              |              |            |

TABLE 1

| WebCode | 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

|        |                       |                 |              |                 |               |                |
|--------|-----------------------|-----------------|--------------|-----------------|---------------|----------------|
| GQXUBA | PowerPlex® Fusion     |                 |              |                 |               |                |
| 4e     | 14,16,16.3,18.3       | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12         |                |
|        | 9,10,11               | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|        | 13,16,17              | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|        | 20,21,22              | 9,12,14         | 5,10,14      |                 | 6,7,9,9.3     | 8,11           |
|        | 14,17                 | 11              |              |                 |               |                |
| GRRJT6 | PowerPlex® Fusion 5C  |                 |              |                 |               |                |
| 4e     | 14,16,16.3,18.3       | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12         |                |
|        | 9,10,11               | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|        | 13,16,17              | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|        | 20,21,22              | 9,12,14         | 5,10,14      |                 | 6,7,9,9.3     | 8,11           |
|        | 14,17                 | 11              |              |                 |               |                |
| GUGRYZ | GlobalFiler™ (STRmix) |                 |              |                 |               |                |
| 4e     | 14,16,16.3,18.3       | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12         |                |
|        | 9,10,11               | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|        | 13,16,17              | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|        | 20,21,22              |                 |              | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|        | 14,17                 | 11              |              |                 | 2             |                |
| GWRMRJ | PowerPlex® 6C         |                 |              |                 |               |                |
| 4e     | [14],16,[16.3],18.3   | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12         |                |
|        | [9],10,[11]           | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]  | 9,[11],[12],14 |
|        | 13,16,[17]            | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]         | 10,11,[12]     |
|        | 20,21,[22]            | 9,[12],[14]     | 5,10,[14]    | 19,24.2,[29.2]  | 6,7,[9],[9.3] | 8,11           |
|        | 14,17                 | 11              | 17           | 19              |               |                |
| GXLBAE | PowerPlex® Fusion 6C  |                 |              |                 |               |                |
| 4e     | 14,16,16.3,18.3       | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12         |                |
|        | 9,10,11               | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|        | 13,16,17              | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|        | 20,21,22              | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|        | 14,17                 | 11              | 17           | 19              |               |                |
| H42DQF | GlobalFiler™          |                 |              |                 |               |                |
| 4e     | [14],16,[16.3],18.3   | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12         |                |
|        | [9],10,[11]           | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]  | 9,[11],[12],14 |
|        | 13,16,[17]            | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]         | 10,11,[12]     |
|        | 20,21,[22]            |                 |              | 19,24.2,[29.2]  | 6,7,[9],[9.3] | 8,11           |
|        | 14,17                 | 11              |              |                 | 2             |                |
| H4LAWN | GlobalFiler™          |                 |              |                 |               |                |
| 4e     | 16,16.3,18.3          | 21,26           | 11,12        | 15,17           | 11,12         |                |
|        | 9,10,11               | 10,14           | 13,14,16     | 17,21           | 13            | 9,14           |
|        | 13,16                 | 13,15           | 30,31,32.2   | 15              | X,X           | 10,11          |
|        | 20,21                 |                 |              | 19,24.2,29.2    | 6,7           | 8              |
|        | 14,17                 |                 |              |                 |               |                |

TABLE 1

| WebCode | 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

|        |                      |                 |              |                 |                 |                |
|--------|----------------------|-----------------|--------------|-----------------|-----------------|----------------|
| HBKL7Z | PowerPlex® Fusion 6C |                 |              |                 |                 |                |
|        | 14,16,16.3,18.3      | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e     | 9,10,11              | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|        | 13,16,17             | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|        | 20,21,22             | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|        | 14,17                | 11              | 17           | 19              |                 |                |
| HFFBQD | PowerPlex® Fusion    |                 |              |                 |                 |                |
|        | 14,16,16.3,18.3      | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e     | 9,10,11              | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|        | 13,16,17             | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|        | 20,21,22             | 9,12,14         | 5,10,14      |                 | 6,7,9,9.3       | 8,11           |
|        | 14,17                | 11              |              |                 |                 |                |
| HXCZM8 | GlobalFiler™         |                 |              |                 |                 |                |
|        | [14],16,[16.3],18.3  | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e     | [9],10,10,[11]       | 10,13,14        | [13],14,16   | 17,[18],21      | [11],13,13,[14] | 9,[11],[12],14 |
|        | 13,16,[17]           | 13,15,[16.2]    | 30,31,32.2   | 15,15,[16]      | X,X,[Y]         | 10,11,[12]     |
|        | 20,21,[22]           |                 |              | 19,24.2,29.2    | 6,7,[9.3]       | 8,11           |
|        | 14,17                | 11              |              |                 | 2               |                |
| JXANJB | PowerPlex® Fusion 6C |                 |              |                 |                 |                |
|        | [14],16,[16.3],18.3  | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e     | [9],10,[11]          | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|        | 13,16,[17]           | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|        | 20,21,[22]           | 9,[12],[14]     | 5,10,[14]    | 19,24.2,[29.2]  | 6,7,[9.3]       | 8,11           |
|        | 14,17                | 11              | 17           | 19              |                 |                |
| K8C9JH | PowerPlex® Fusion 6C |                 |              |                 |                 |                |
|        | 14,16,16.3,18.3      | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e     | 9,10,11              | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|        | 13,16,17             | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|        | 20,21,22             | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|        | 14,17                | 11              | 17           | 19              |                 |                |
| K9KKWD | GlobalFiler™         |                 |              |                 |                 |                |
|        | 14,16,16.3,18.3      | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e     | 9,10                 | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|        | 13,16,17             | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|        | 20,21,22             |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|        | 14,17                | 11              |              |                 | 2               |                |
| KECM6K | PowerPlex® Fusion 6C |                 |              |                 |                 |                |
|        | 14,16,16.3,18.3      | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e     | 9,10,11              | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|        | 13,16,17             | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|        | 20,21,22             | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|        | 14,17                | 11              | 17           | 19              |                 |                |

TABLE 1

| WebCode               | 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 |  |                   |              |                 |               |                |
| KUM9NA                | GlobalFiler™   |                   |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26       | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14          | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2        | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   |                   |              | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11                |              |                 | 2             |                |
| KWTQQC                | PowerPlex® Fusion 6C                                   |                   |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26       | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14          | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2        | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   | 9,12,14           | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11                | 17           | 19              |               |                |
| KWVGYF                | GlobalFiler™ (STRmix)                                  |                   |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26       | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14          | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2        | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   |                   |              | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11                |              |                 | 2             |                |
| KY249D                | PowerPlex® Fusion 6C                                   |                   |              |                 |               |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26   | 11,12,[14]   | 15,[16],17,[18] | 11,12         |                |
| 4e                    | [9],10,[11]  | 10,[13],14        | [13],14,16   | 17,[18],21      | [11],13,[14]  | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]      | [30],31,32.2 | 15,[16]         | X,[Y]         | 10,11,[12]     |
|                       | 20,21,[22]   | 9,[12],[14]       | 5,10,[14]    | 19,24.2,[29.2]  | 6,7,[9],[9.3] | 8,11           |
|                       | 14,17  | 11                | 17           | 19              |               |                |
| L66AJA                | GlobalFiler™   |                   |              |                 |               |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],[26] | 11,12,[14]   | 15,[16],17,[18] | 11,12         |                |
| 4e                    | 10,[11]  | 10,[13],14        | [13],14,16   | 17,[18],21      | [11],13,[14]  | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]      | [30],31,32.2 | 15,15           | X,[Y]         | 10,11,[12]     |
|                       | 20,21,[22]   |                   |              | 19,24.2,[29.2]  | 6,7,[9],[9.3] | 8,11           |
|                       | 14,17  | 11                |              |                 | 2             |                |
| LB8JP3                | GlobalFiler™   |                   |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26       | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14          | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2        | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   |                   |              | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11                |              |                 | 2             |                |
| LNY6XJ                | PowerPlex® Fusion 6C                                   |                   |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26       | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14          | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2        | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   | 9,12,14           | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11                | 17           | 19              |               |                |

TABLE 1

| WebCode               | 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 |  |                 |              |                 |               |                |
| LQ6LBG                | PowerPlex® Fusion 6C                                   |                 |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |               |                |
| LTPF8G                | PowerPlex® Fusion 6C                                   |                 |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |               |                |
| LYYFPE                | GlobalFiler™   |                 |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11              |              |                 | 2             |                |
| M7VXB                 | PowerPlex® Fusion 6C (STRmix)                          |                 |              |                 |               |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12         |                |
| 4e                    | [9],10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]  | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]         | 10,11,[12]     |
|                       | 20,21,[22]   | 9,[12],[14]     | 5,10,[14]    | 19,24.2,[29.2]  | 6,7,[9],[9.3] | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |               |                |
| MBQFZG                | GlobalFiler™ (STRMIX)                                  |                 |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11              |              |                 | 2             |                |
| MGCKNB                | GlobalFiler™   |                 |              |                 |               |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12         |                |
| 4e                    | [9],10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]  | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]         | 10,11,[12]     |
|                       | 20,21,[22]   |                 |              | 19,24.2,[29.2]  | 6,7,[9],[9.3] | 8,11           |
|                       | 14,17  | 11              |              |                 | 2             |                |
| MHRUM4                | GlobalFiler™ (STRmix)                                  |                 |              |                 |               |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12         |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14      | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y           | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3     | 8,11           |
|                       | 14,17  | 11              |              |                 | 2             |                |

TABLE 1

| WebCode               | 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 |  |                 |              |                 |                 |                |
| MUF32W                | GlobalFiler™   |                 |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              |              |                 | 2               |                |
| MW4GQ7                | GlobalFiler™   |                 |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11              |              |                 | 2               |                |
| NJD32X                | GlobalFiler™   |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | [9],10,10,[11]   | 10,13,14        | [13],14,16   | 17,[18],21      | [11],13,13,[14] | 9,[11,12],14   |
|                       | 13,16,[17]   | 13,15,[16.2]    | 30,31,32.2   | 15,15,[16]      | X,X,[Y]         | 10,11,[12]     |
|                       | 20,21,[22]   |                 |              | 19,24.2,29.2    | 6,7,[9,9.3]     | 8,11           |
|                       | 14,17  | 11              |              |                 | 2               |                |
| PCEV4A                | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | [9],10,10,[11]   | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,13,[14] | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,15,[16]      | X,X,[Y]         | 10,11,[12]     |
|                       | 20,21,[22]   | 9,9,[12],[14]   | 5,10,[14]    | 19,24.2,[29.2]  | 6,7,[9],[9.3]   | 8,11           |
|                       | 14,17  | [11]            | [17]         | [19]            |                 |                |
| PEYP2A                | Investigator® 24plex (STRmix)                          |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | 10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|                       | 20,21,[22]   |                 |              | 19,24.2,[29.2]  | 6,7,[9],[9.3]   | 8,11           |
|                       | 14,17  | 11              |              |                 |                 |                |
| PK4GA8                | PowerPlex® ESX 16 FAST                                 |                 |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,26      | 11,12,[14]   | 15,17,[18]      |                 |                |
| 4e                    |  | 10,[13],14      | [13],14,16   | 17,[18],21      |                 | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15              | X               |                |
|                       | 20,21,[22]   |                 |              |                 | 6,7,[9],[9.3]   |                |
|                       | 14,17  |                 |              |                 |                 |                |
| Q4UYT8                | PowerPlex® Fusion 6C                                   |                 |              |                 |                 |                |
|                       | (14),16,(16.3),18.3                                    | (17),21,(24),26 | 11,12,(14)   | 15,(16),17,(18) | 11,12           |                |
| 4e                    | (9),10,(11)  | 10,(13),14      | (13),14,16   | 17,(18),21      | (11),13,(14)    | 9,(11),(12),14 |
|                       | 13,16,(17)   | 13,15,(16.2)    | (30),31,32.2 | 15,15           | X,(Y)           | 10,11,(12)     |
|                       | 20,21,(22)   | 9,(12)          | 5,10,(14)    | 19,24.2,(29.2)  | 6,7,(9),(9.3)   | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |                 |                |

TABLE 1

| WebCode               | 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 |  |                   |              |                 |                 |                |
| QA2KPG                | GlobalFiler™ (STRmix)                                  |                   |              |                 |                 |                |
|                       | 14,16,[16.3],18.3                                      | 17,21,24,26       | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14          | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,[12],14   |
|                       | 13,16,17   | 13,15,[16.2]      | 30,31,32.2   | 15              | X,Y             | 10,11,12       |
|                       | 20,21,22   |                   |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11                |              |                 | 2               |                |
| QA2Z6H                | GlobalFiler™   |                   |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26       | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14          | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2        | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   |                   |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11                |              |                 | 2               |                |
| QBZX9                 | GlobalFiler™   |                   |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26   | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | [9],10,[11]  | 10,[13],14        | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]      | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|                       | 20,21,[22]   |                   |              | 19,24.2,[29.2]  | [6],7,[9],[9.3] | 8,[11]         |
|                       | 14,17  | 11                |              |                 | 2               |                |
| QVJWAR                | PowerPlex® Fusion 5C                                   |                   |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26   | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | [9],10,[11]  | 10,[13],14        | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]      | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|                       | 20,21,[22]   | 9,[12],[14]       | 5,10,[14]    |                 | 6,7,[9],[9.3]   | 8,11           |
|                       | 14,17  | 11                |              |                 |                 |                |
| QWR3T8                | PowerPlex® Fusion 6C (STRmix)                          |                   |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26       | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14          | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2        | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   | 9,12,14           | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11                | 17           | 19              |                 |                |
| QWX28Q                | GlobalFiler™   |                   |              |                 |                 |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],[26] | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e                    | [9],10,[11]  | 10,13,14          | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]      | [30],31,32.2 | 15,[16]         | X,[Y]           | [10],11,[12]   |
|                       | 20,21,[22]   |                   |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11                |              |                 | 2               |                |
| QZELU7                | PowerPlex® Fusion 6C                                   |                   |              |                 |                 |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26       | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e                    | 9,10,11  | 10,13,14          | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2        | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|                       | 20,21,22   | 9,12,14           | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|                       | 14,17  | 11                | 17           | 19              |                 |                |

TABLE 1

| <b>WebCode Amplification Kits (Probabilistic Genotyping Software)</b> |                               |                 |                 |                 |                   |                |
|---|-------------------------------|-----------------|-----------------|-----------------|-------------------|----------------|
| <b>Item</b>   | <b>D1S1656</b>                | <b>D2S1338</b>  | <b>D2S441</b>   | <b>D3S1358</b>  | <b>D5S818</b>     | <b>D6S1043</b> |
|   | <b>D7S820</b>                 | <b>D8S1179</b>  | <b>D10S1248</b> | <b>D12S391</b>  | <b>D13S317</b>    | <b>D16S539</b> |
|   | <b>D18S51</b>                 | <b>D19S433</b>  | <b>D21S11</b>   | <b>D22S1045</b> | <b>Amelogenin</b> | <b>CSF1PO</b>  |
|   | <b>FGA</b>                    | <b>Penta D</b>  | <b>Penta E</b>  | <b>SE33</b>     | <b>TH01</b>       | <b>TPOX</b>    |
|   | <b>vWA</b>                    | <b>DYS391</b>   | <b>DYS570</b>   | <b>DYS576</b>   | <b>Y Indel</b>    |                |
| <b>Item 4e - STR Results</b>  |                               |                 |                 |                 |                   |                |
| R4PY8X  | GlobalFiler™                  |                 |                 |                 |                   |                |
|   | [14],16,[16.3],18.3           | [17],21,[24],26 | 11,12,[14]      | 15,[16],17,[18] | 11,12             |                |
| 4e  | [9],10,10,[11]                | 10,13,14        | [13],14,16      | 17,[18],21      | [11],13,13,[14]   | 9,[11],[12],14 |
|   | 13,16,[17]                    | 13,15,[16.2]    | 30,31,32.2      | 15,15,[16]      | X,X,[Y]           | 10,11,[12]     |
|   | 20,21,[22]                    |                 |                 | 19,24.2,29.2    | 6,7,[9],[9.3]     | 8,11           |
|   | 14,17                         | 11              |                 |                 | 2                 |                |
| R8UK4B  | PowerPlex® Fusion             |                 |                 |                 |                   |                |
|   | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,[14]      | 15,16,17,18     | 11,12             |                |
| 4e  | [9],10,10,[11]                | 10,13,14        | 13,14,16        | 17,18,21        | [11],13,13,[14]   | 9,11,12,14     |
|   | 13,16,17                      | 13,15,[16.2]    | 30,31,32.2      | 15,15,[16]      | X,X               | 10,11,[12]     |
|   | 20,21,[22]                    | 9,9,[12,14]     | 5,10,[14]       |                 | 6,7,[9,9.3]       | 8,11           |
|   | 14,17                         | 11              |                 |                 |                   |                |
| REB3J4  | GlobalFiler™                  |                 |                 |                 |                   |                |
|   | [14],16,[16.3],18.3           | [17],21,[24],26 | 11,12,[14]      | 15,[16],17,[18] | 11,12             |                |
| 4e  | [9],10,[11]                   | 10,[13],14      | [13],14,16      | 17,[18],21      | [11],13,[14]      | 9,[11],[12],14 |
|   | 13,16,[17]                    | 13,15,[16.2]    | [30],31,32.2    | 15,15           | X,[Y]             | 10,11,[12]     |
|   | 20,21,[22]                    |                 |                 | 19,24.2,[29.2]  | 6,7,[9],[9.3]     | 8,[11]         |
|   | 14,17                         | 11              |                 |                 | 2                 |                |
| RNBZYQ  | GlobalFiler™ (STRmix)         |                 |                 |                 |                   |                |
|   | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12             |                |
| 4e  | 9,10,11                       | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14          | 9,11,12,14     |
|   | 13,16,17                      | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y               | 10,11,12       |
|   | 20,21,22                      |                 |                 | 19,24.2,29.2    | 6,7,9,9.3         | 8,11           |
|   | 14,17                         | 11              |                 |                 | 2                 |                |
| RNCTWY  | PowerPlex® Fusion             |                 |                 |                 |                   |                |
|   | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12             |                |
| 4e  | 9,10,11                       | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14          | 9,11,12,14     |
|   | 13,16,17                      | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y               | 10,11,12       |
|   | 20,21,22                      | 9,12,14         | 5,10,14         |                 | 6,7,9,9.3         | 8,11           |
|   | 14,17                         | 11              |                 |                 |                   |                |
| RNYYGX  | GlobalFiler™                  |                 |                 |                 |                   |                |
|   | [14],16,[16.3],18.3           | [17],21,[24],26 | 11,12,[14]      | 15,[16],17,[18] | 11,12             |                |
| 4e  | [9],10,10,[11]                | 10,13,14        | [13],14,16      | 17,[18],21      | [11],13,13,[14]   | 9,[11],[12],14 |
|   | 13,16,[17]                    | 13,15,[16.2]    | 30,31,32.2      | 15,15,[16]      | X,X,[Y]           | 10,11,[12]     |
|   | 20,21,[22]                    |                 |                 | 19,24.2,29.2    | 6,7,[9],[9.3]     | 8,11           |
|   | 14,17                         | 11              |                 |                 | 2                 |                |
| RPBNQ3  | PowerPlex® Fusion 6C (STRmix) |                 |                 |                 |                   |                |
|   | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12             |                |
| 4e  | 9,10,11                       | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14          | 9,11,12,14     |
|   | 13,16,17                      | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y               | 10,11,12       |
|   | 20,21,22                      | 9,12,14         | 5,10,14         | 19,24.2,29.2    | 6,7,9,9.3         | 8,11           |
|   | 14,17                         | 11              | 17              | 19              |                   |                |

TABLE 1

| WebCode | 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         |                |
|         | <b>Item 4e - STR Results</b>                           |                 |                 |                 |                 |                |
| RX4YXC  | PowerPlex® Fusion                                      |                 |                 |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,30,[31,32.2] | 15,16           | X,X,[Y]         | 10,11,12       |
|         | 20,21,22   | 9,12,14         | [5],10,14       |                 | 6,7,9,9.3       | 8,8,[11]       |
|         | 14,17  | 11              |                 |                 |                 |                |
| T8BX8E  | GlobalFiler™   |                 |                 |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   |                 |                 | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |                 |                 | 2               |                |
| TFG3XA  | PowerPlex® Fusion 6C                                   |                 |                 |                 |                 |                |
|         | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14        | 15,16,17,18     | 11,12           |                |
| 4e      | 9,10,11  | 10,13,14        | 13,14,16        | 17,18,21        | 11,13,14        | 9,11,12,14     |
|         | 13,16,17   | 13,15,16.2      | 30,31,32.2      | 15,16           | X,Y             | 10,11,12       |
|         | 20,21,22   | 9,12,14         | 5,10,14         | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              | 17              | 19              |                 |                |
| TGVC34  | Investigator® 24plex                                   |                 |                 |                 |                 |                |
|         | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]      | 15,[16],17,[18] | 11,12           |                |
| 4e      | 10,[11]  | 10,[13],14      | [13],14,16      | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|         | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2    | 15,15           | X,[Y]           | 10,11,[12]     |
|         | 20,21,[22]   |                 |                 | 19,24.2,[29.2]  | 6,7,[9],[9.3]   | 8,11           |
|         | 14,17  | 11              |                 |                 |                 |                |
| TLNE9N  | GlobalFiler™   |                 |                 |                 |                 |                |
|         | [14],16,[16.3],18.3                                    | 17,21,[24],26   | 11,12,[14]      | 15,[16],17,[18] | 11,12           |                |
| 4e      | [9],10,[11]  | 10,13,14        | [13],14,16      | 17,[18],21      | [11],13,[14]    | 9,[11,12],14   |
|         | 13,16,[17]   | 13,15,[16.2]    | 30,31,32.2      | 15,[16]         | X,[Y]           | 10,11,[12]     |
|         | 20,21,[22]   |                 |                 | 19,24.2,[29.2]  | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |                 |                 | 2               |                |
| TXJHHA  | PowerPlex® Fusion                                      |                 |                 |                 |                 |                |
|         | 14,16,16.3,18.3  | [17],21,[24],26 | 11,12,14        | 15,16,17,18     | 11,12           |                |
| 4e      | [9],10,10,[11]   | 10,13,14        | 13,14,16        | 17,[18],21      | [11],13,13,[14] | 9,11,12,14     |
|         | 13,16,17   | 13,15,[16.2]    | 30,31,32.2      | 15,15,[16]      | X,X,[Y]         | 10,11,12       |
|         | 20,21,[22]   | 9,9,[12,14]     | 5,10,[14]       |                 | 6,7,9,9.3       | 8,11           |
|         | 14,17  | 11              |                 |                 |                 |                |
| TXY238  | PowerPlex® Fusion 6C                                   |                 |                 |                 |                 |                |
|         | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]      | 15,[16],17,[18] | 11,12           |                |
| 4e      | [9],10,[11]  | 10,[13],14      | [13],14,16      | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|         | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2    | 15,15           | X,[Y]           | 10,11,[12]     |
|         | 20,21,[22]   | 9,[12],14       | 5,10,[14]       | 19,24.2,[29.2]  | 6,7,[9],[9.3]   | 8,11           |
|         | 14,17  | 11              | 17              | 19              |                 |                |

TABLE 1

| WebCode | 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**

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| U3C4P3 | PowerPlex® 21 (STRmix) |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 |  | 15,16,17,18 | 11,12 | 11,12,13 |
| 4e | 9,10,11 | 10,13,14 |  | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 |  | X,Y | 10,11,12 |
|  | 20,21,22 | 9,12,14 | 5,10,14 |  | 6,7,9,9.3 | 8,11 |
|  | 14,17 |  |  |  |  |  |
| U6D6PZ | PowerPlex® Fusion 6C (STRmix) |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 | 9,12,14 | 5,10,14 | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| UXDWYY | GlobalFiler™ (STRmix) |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 |  |  | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 |  |  | 2 |  |
| UYCTT3 | Identifier® Plus |  |  |  |  |  |
|  |  | [17],21,[24],26 |  | 15,[16],17,[18] | 11,12 |  |
| 4e | [9],10,[11] | 10,13,14 |  | [11],13,[14] | 9,[11],[12],14 |  |
|  | 13,16,[17] | 13,15,[16.2] | 30,31,32.2 |  | X,[Y] | 10,11,[12] |
|  | 20,21,[22] |  |  |  | 6,7,[9],[9.3] | 8,11 |
|  | 14,17 |  |  |  |  |  |
| VLJTE7 | GlobalFiler™ (STRmix) |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 | 13,14,16 | 17,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15 | X,Y | 10,11,12 |
|  | 20,21,22 |  |  | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 |  |  | 2 |  |
| VTZA49 | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 | 9,12,14 | 5,10,14 | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| W7K9A2 | GlobalFiler™ |  |  |  |  |  |
|  | [14],16,[16.3],18.3 | [17],21,[24],26 | 11,12,[14] | 15,[16],17,[18] | 11,12 |  |
| 4e | [9],10,[11] | 10,[13],14 | [13],14,16 | 17,[18],21 | [11],13,[14] | 9,[11],[12],14 |
|  | 13,16,[17] | 13,15,[16.2] | [30],31,32.2 | 15,[16] | X,[Y] | 10,11,[12] |
|  | 20,21,[22] |  |  | 19,24.2,[29.2] | [6],7,[9],[9.3] | 8,11 |
|  | 14,17 | 11 |  |  | 2 |  |

TABLE 1

| WebCode               | 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 |  |                 |              |                 |              |                |
| WR3HAZ                | PowerPlex® Fusion 6C                                   |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |              |                |
| X3DFN3                | Identifiler® Plus                                      |                 |              |                 |              |                |
|                       |  | 17,21,24,26     |              | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        |              |                 | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   |                 | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              |                 | 6,7,9,9.3    | 8,11           |
|                       | 14,17  |                 |              |                 |              |                |
| X8AW99                | GlobalFiler™   |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              | 17           | 19              | 2            |                |
| XC8DL3                | PowerPlex® Fusion 6C                                   |                 |              |                 |              |                |
|                       | [14],16,[16.3],18.3                                    | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12        |                |
| 4e                    | [9],10,[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14] | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]        | 10,11,[12]     |
|                       | 20,21,[22]   | 9,[12],[14]     | 5,10,[14]    | 19,24.2,[29.2]  | 6,7,[9],9.3  | 8,11           |
|                       | 14,17  | 11              | 17           | 19              |              |                |
| XCNGA3                | Identifiler® Plus                                      |                 |              |                 |              |                |
|                       |  | 17,21,26        |              | 15,16,17,18     | 11,12        |                |
| 4e                    | 10,11  | 10,13,14        |              |                 | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   |                 | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              |                 | 6,7,9,9.3    | 8,11           |
|                       | 14,17  |                 |              |                 |              |                |
| XG38J4                | GlobalFiler™ (STRmix)                                  |                 |              |                 |              |                |
|                       | 14,16,16.3,18.3  | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12        |                |
| 4e                    | 9,10,11  | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14     | 9,11,12,14     |
|                       | 13,16,17   | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y          | 10,11,12       |
|                       | 20,21,22   |                 |              | 19,24.2,29.2    | 6,7,9,9.3    | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |
| XGXR4H                | GlobalFiler™   |                 |              |                 |              |                |
|                       | [14],16,[16.3],18.3                                    | 17,21,[24],26   | 11,12,[14]   | 15,[16],17,[18] | 11,12        |                |
| 4e                    | [10],[11]  | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14] | 9,[11],[12],14 |
|                       | 13,16,[17]   | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]        | 10,11,[12]     |
|                       | 20,21,[22]   |                 |              | 19,24.2,[29.2]  | 6,7,[9],9.3  | 8,11           |
|                       | 14,17  | 11              |              |                 | 2            |                |

TABLE 1

| WebCode | 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

| XNHTKV | PowerPlex® Fusion             |                 |              |                 |                 |                |
|--------|-------------------------------|-----------------|--------------|-----------------|-----------------|----------------|
|        | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e     | 9,10,11                       | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|        | 13,16,17                      | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|        | 20,21,22                      | 9,12,14         | 5,10,14      |                 | 6,7,9,9.3       | 8,11           |
|        | 14,17                         | 11              |              |                 |                 |                |
| XPRVAZ | PowerPlex® Fusion 5C          |                 |              |                 |                 |                |
|        | [14],16,18.3                  | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e     | [9],10,[11]                   | 10,13,14        | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|        | 13,16,[17]                    | 13,15,[16.2]    | [30],31,32.2 | 15,15           | X,Y             | 10,11,[12]     |
|        | 20,21,[22]                    | 9,[12],[14]     | 5,10,[14]    |                 | 6,7,[9],[9.3]   | 8,11           |
|        | 14,17                         | 11              |              |                 |                 |                |
| XRWJUW | PowerPlex® Fusion 6C (STRmix) |                 |              |                 |                 |                |
|        | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e     | 9,10,11                       | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|        | 13,16,17                      | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|        | 20,21,22                      | 9,12,14         | 5,10,14      | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|        | 14,17                         | 11              | 17           | 19              |                 |                |
| XU7FEZ | PowerPlex® Fusion 5C          |                 |              |                 |                 |                |
|        | [14],16,[16.3],18.3           | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e     | [9],10,[11]                   | 10,[13],14      | [13],14,16   | 17,[18],21      | [11],13,[14]    | 9,[11],[12],14 |
|        | 13,16,[17]                    | 13,15,[16.2]    | [30],31,32.2 | 15,[16]         | X,[Y]           | 10,11,[12]     |
|        | 20,21,[22]                    | 9,[12],[14]     | 5,10,[14]    |                 | 6,7,[9],[9.3]   | 8,11           |
|        | 14,17                         | 11              |              |                 |                 |                |
| YCZL8R | GlobalFiler™                  |                 |              |                 |                 |                |
|        | 16,[16.3],18.3                | [17],21,[24],26 | 11,12,[14]   | 15,[16],17,[18] | 11,12           |                |
| 4e     | [9],10,10,[11]                | 10,[13],14      | [13],14,16   | 17,21           | [11],13,13,[14] | 9,[11],[12],14 |
|        | 13,16,[17]                    | 13,15,[16.2]    | [30],31,32.2 | 15,15,[16]      | X,X,[Y]         | 10,11,[12]     |
|        | 20,21,[22]                    |                 |              | 19,24.2,[29.2]  | 6,7,[9],[9.3]   | 8,11           |
|        | 14,17                         | [11]            |              |                 | [2]             |                |
| YRVV3K | GlobalFiler™ (STRmix)         |                 |              |                 |                 |                |
|        | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e     | 9,10,11                       | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|        | 13,16,17                      | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|        | 20,21,22                      |                 |              | 19,24.2,29.2    | 6,7,9,9.3       | 8,11           |
|        | 14,17                         | 11              |              |                 | 2               |                |
| YRXMZR | PowerPlex® Fusion             |                 |              |                 |                 |                |
|        | 14,16,16.3,18.3               | 17,21,24,26     | 11,12,14     | 15,16,17,18     | 11,12           |                |
| 4e     | 9,10,11                       | 10,13,14        | 13,14,16     | 17,18,21        | 11,13,14        | 9,11,12,14     |
|        | 13,16,17                      | 13,15,16.2      | 30,31,32.2   | 15,16           | X,Y             | 10,11,12       |
|        | 20,21,22                      | 9,12,14         | 5,10,14      |                 | 6,7,9,9.3       | 8,11           |
|        | 14,17                         | 11              |              |                 |                 |                |

TABLE 1

| WebCode | 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**

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| ZARTPX | PowerPlex® Fusion 6C (STRmix) |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 | 9,12,14 | 5,10,14 | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| ZAUM94 | PowerPlex® Fusion |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | [9],10,10,[11] | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,15,[16] | X,X,[Y] | 10,11,12 |
|  | 20,21,22 | 9,9,[12],[14] | 5,10,14 |  | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 |  |  |  |  |
| ZEH8BY | GlobalFiler™ |  |  |  |  |  |
|  | [14],16,[16.3],18.3 | [17],21,[24],26 | 11,12,[14] | 15,[16],17,[18] | 11,12 | Not Tested |
| 4e | [9],10,[11] | 10,[13],14 | [13],14,16 | 17,[18],21 | [11],13,[14] | 9,[11],[12],14 |
|  | 13,16,[17] | 13,15,[16.2] | 30,31,32.2 | 15,[16] | X,[Y] | 10,11,[12] |
|  | 20,21,[22] | Not Tested | Not Tested | 19,24.2,[29.2] | 6,7,9,[9.3] | 8,11 |
|  | 14,17 | 11 | Not Tested | Not Tested | 2 |  |
| ZKAHKW | GlobalFiler™ (TrueAllele) |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 |  |  | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 |  |  | 2 |  |
| ZWHZEL | GlobalFiler™ |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 |  |  | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 |  |  | 2 |  |
| ZYA44L | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 14,16,16.3,18.3 | 17,21,24,26 | 11,12,14 | 15,16,17,18 | 11,12 |  |
| 4e | 9,10,11 | 10,13,14 | 13,14,16 | 17,18,21 | 11,13,14 | 9,11,12,14 |
|  | 13,16,17 | 13,15,16.2 | 30,31,32.2 | 15,16 | X,Y | 10,11,12 |
|  | 20,21,22 | 9,12,14 | 5,10,14 | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 | 17 | 19 |  |  |

TABLE 1

| WebCode | 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

|        |                       |            |          |            |            |       |
|--------|-----------------------|------------|----------|------------|------------|-------|
| 2JRNH2 | PowerPlex® Fusion 6C  |            |          |            |            |       |
|        | 14,16.3               | 17,24      | 11,12,14 | 16,18      | 11,12      |       |
| 4sp    | 9,11                  | 13         | 13,14,16 | 18,21      | 11,13,14   | 11,12 |
|        | 16,17                 | 13,15,16.2 | 30       | 15,16      | X,Y        | 11,12 |
|        | 20,22                 | 9,12,14    | 10,14    | 29.2       | 6,9,9.3    | 8     |
|        | 14,17                 | 11         | 17       | 19         |            |       |
| 2TUB6R | GlobalFiler™ (STRmix) |            |          |            |            |       |
|        | 14,16.3               | 17,24      | 11,14    | 16,18      | 11,12      |       |
| 4sp    | 9,11                  | 13         | 13,14    | 18,21      | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2    | 30       | 15,16      | X,Y        | 11,12 |
|        | 20,22                 |            |          | 29.2       | 9,9.3      | 8     |
|        | 14,17                 | 11         |          |            | 2          |       |
| 2VNYNN | GlobalFiler™          |            |          |            |            |       |
|        | 14,16.3               | 17,24      | 11,14    | 16,18      | 11,12      |       |
| 4sp    | 9,11                  | 13,13      | 13,14    | 18,(20),21 | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2    | 30,30    | 15,16      | X,Y        | 11,12 |
|        | 20,22                 |            |          | 29.2,29.2  | 9,9.3      | 8,8   |
|        | 14,17                 | 11         |          |            | 2          |       |
| 38ZG4X | PowerPlex® Fusion 6C  |            |          |            |            |       |
|        | 14,16.3               | 17,24      | 11,14    | 16,18      | 11,12      |       |
| 4sp    | 9,11                  | 13,13      | 13,14    | 18,21      | 11,[13],14 | 11,12 |
|        | 16,17                 | 15,16.2    | 30,30    | 15,16      | X,Y        | 11,12 |
|        | 20,22                 | 12,14      | 10,14    | 29.2,29.2  | 9,9.3      | 8,8   |
|        | 14,17                 | 11         | 17       | 19         |            |       |
| 3BW84H | GlobalFiler™          |            |          |            |            |       |
|        | 14,16.3               | 17,24      | 11,14    | 16,18      | 11,12      |       |
| 4sp    | 9,11                  | 13         | 13,14    | 18,21      | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2    | 30       | 15,16      | X,Y        | 11,12 |
|        | 20,22                 |            |          | 29.2       | 9,9.3      | 8     |
|        | 14,17                 | 11         |          |            | 2          |       |
| 3DZ6CP | GlobalFiler™          |            |          |            |            |       |
|        | 14,16.3               | 17,24      | 11,14    | 16,18      | 11,12      |       |
| 4sp    | 9,11                  | 13         | 13,14    | 18,21      | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2    | 30       | 15,16      | X,Y        | 11,12 |
|        | 20,22                 |            |          | 29.2       | 9,9.3      | 8     |
|        | 14,17                 | 11         |          |            | 2          |       |
| 3EY27T | PowerPlex® Fusion 6C  |            |          |            |            |       |
|        | 14,16.3               | 17,24      | 11,14    | 16,18      | 11,12      |       |
| 4sp    | 9,11                  | 13,13      | 13,14    | 18,21      | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2    | 30,30    | 15,16      | X,Y        | 11,12 |
|        | 20,22                 | 12,14      | 10,14    | 29.2,29.2  | 9,9.3      | 8,8   |
|        | 14,17                 | 11         | 17       | 19         |            |       |

TABLE 1

| WebCode                | 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 |  |         |          |            |            |         |
| 3NYTCY                 | GlobalFiler™ (STRmix)                                  |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2       | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |            | 2          |         |
| 3PGKN4                 | GlobalFiler™   |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2       | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |            | 2          |         |
| 4EQNTG                 | GlobalFiler™   |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,[17],18 | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2       | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |            | 2          |         |
| 4GD3HQ                 | PowerPlex® Fusion                                      |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    |            | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |            | 2          |         |
| 4NEG6D                 | GlobalFiler™   |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2       | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |            | 2          |         |
| 4X46XU                 | GlobalFiler™   |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2       | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |            | 2          |         |
| 4YWYXK                 | GlobalFiler™   |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2       | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |            | 2          |         |

TABLE 1

| WebCode                       | 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    |         |
| <b>Item 4sp - STR Results</b> |  |         |          |           |            |         |
| 66H4ER                        | PowerPlex® Fusion 6C (STRmix)                          |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                               | 20,22  | 12,14   | 10,14    | 29.2,29.2 | 9,9.3      | 8,8     |
|                               | 14,17  | 11      | 17       | 19        |            |         |
| 66J9KM                        | GlobalFiler™   |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                               | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                               | 14,17  | 11      |          |           | 2          |         |
| 69HFAR                        | PowerPlex® Fusion 6C (STRmix)                          |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                               | 20,22  | 12,14   | 10,14    | 29.2,29.2 | 9,9.3      | 8,8     |
|                               | 14,17  | 11      | 17       | 19        |            |         |
| 69HJGM                        | GlobalFiler™   |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                               | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                               | 14,17  | 11      |          |           | 2          |         |
| 6JJRHE                        | GlobalFiler™ (STRmix)                                  |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                               | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                               | 14,17  | 11      |          |           | 2          |         |
| 6K9DTG                        | GlobalFiler™   |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                               | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                               | 14,17  | 11      |          |           | 2          |         |
| 6YP97R                        | PowerPlex® Fusion 6C                                   |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                               | 20,22  | 12,14   | 10,14    | 29.2,29.2 | 9,9.3      | 8,8     |
|                               | 14,17  | 11      | 17       | 19        |            |         |

TABLE 1

| WebCode                | 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 |  |         |          |              |            |         |
| 7A93XE                 | PowerPlex® Fusion 6C (STRmix)                          |         |          |              |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18        | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21        | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16        | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2    | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19           |            |         |
| 7HHCMT                 | GlobalFiler™   |         |          |              |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18        | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21        | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16        | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2         | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |              | 2          |         |
| 7HYN3D                 | GlobalFiler™   |         |          |              |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18        | 11,12      | --      |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21        | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16        | X,Y        | 11,12   |
|                        | 20,22  | --      | --       | 29.2,29.2    | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | --       | --           | 2          |         |
| 7KLAUF                 | PowerPlex® Fusion 6C                                   |         |          |              |            |         |
|                        | 14,16.3  | 17,24   | 11,12,14 | 16,18        | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21        | 11,13,14   | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16        | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 19,24.2,29.2 | 9,9.3      | 8       |
|                        | 14,17  | 11      | 17       | 19           |            |         |
| 7KM3RM                 | GlobalFiler™   |         |          |              |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18        | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21        | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16        | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2         | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |              | 2          |         |
| 7NUB3T                 | PowerPlex® Fusion 6C                                   |         |          |              |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18        | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21        | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16        | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2    | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19           |            |         |
| 7QE6YT                 | GlobalFiler™   |         |          |              |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18        | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21        | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30,[31]  | 15,16        | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2    | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |              | 2          |         |

TABLE 1

| WebCode                | 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 |  |         |          |           |            |         |
| 7RQ4RG                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |           | 2          |         |
| 7RRYFT                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |
| 8CTDAP                 | PowerPlex® Fusion 6C                                   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19        |            |         |
| 8DQFJN                 | PowerPlex® Fusion 6C (STRmix)                          |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19        |            |         |
| 8HF27G                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |           | 2          |         |
| 8KJYFN                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |
| 96QUX2                 | Identifier® Plus                                       |         |          |           |            |         |
|                        |  | 17,24   |          | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   |          |           | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    |           | X,Y        | 11,12   |
|                        | 20,22  |         |          |           | 9,9.3      | 8,8     |
|                        | 14,17  |         |          |           |            |         |

TABLE 1

| WebCode | 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

|        |                      |         |       |           |            |       |
|--------|----------------------|---------|-------|-----------|------------|-------|
| 97JFFC | GlobalFiler™         |         |       |           |            |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                 | 13      | 13,14 | 18,21     | 11,[13],14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                | 11      |       |           | 2          |       |
| 9DG8LK | GlobalFiler™         |         |       |           |            |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                 | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                | 11      |       |           | 2          |       |
| 9LAHWF | GlobalFiler™         |         |       |           |            |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                 | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                | 11      |       |           | 2          |       |
| 9NXWKP | Identifier® Plus     |         |       |           |            |       |
|        |                      | 17,24   |       | 16,18     | 11,12      |       |
| 4sp    | 9,11                 | 13      |       |           | 11,14      | 11,12 |
|        | 16,17                | 15,16.2 | 30    |           | X,Y        | 11,12 |
|        | 20,22                |         |       |           | 9,9.3      | 8     |
|        | 14,17                |         |       |           |            |       |
| 9PWWNV | PowerPlex® Fusion 6C |         |       |           |            |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                 | 13      | 13,14 | 18,21     | 11,13,14   | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                | 12,14   | 10,14 | 29.2      | 9,9.3      | 8     |
|        | 14,17                | 11      | 17    | 19        |            |       |
| 9QAJ6P | PowerPlex® Fusion 6C |         |       |           |            |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                 | 13      | 13,14 | 18,21     | 11,13,14   | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                | 12,14   | 10,14 | 29.2      | 9,9.3      | 8     |
|        | 14,17                | 11      | 17    | 19        |            |       |
| 9V3NTM | GlobalFiler™         |         |       |           |            |       |
|        | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                |         |       | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                | 11      |       |           | 2          |       |

TABLE 1

| WebCode | 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

|        |                               |         |       |           |            |       |
|--------|-------------------------------|---------|-------|-----------|------------|-------|
| 9ZEG6L | GlobalFiler™                  |         |       |           |            |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                          | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                         |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                         | 11      |       |           | 2          |       |
| A6LKEK | PowerPlex® Fusion 6C (STRmix) |         |       |           |            |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                         | 12,14   | 10,14 | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                         | 11      | 17    | 19        |            |       |
| A86L98 | PowerPlex® Fusion 6C (STRMix) |         |       |           |            |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                          | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                         | 12,14   | 10,14 | 29.2      | 9,9.3      | 8     |
|        | 14,17                         | 11      | 17    | 19        |            |       |
| A9Z4B9 | GlobalFiler™ (STRmix)         |         |       |           |            |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                          | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                         |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                         | 11      |       |           | 2          |       |
| ADY9CT | PowerPlex® Fusion             |         |       |           |            |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3      | 8,8   |
|        | 14,17                         | 11      |       |           |            |       |
| AF3DJL | Investigator® 24plex          |         |       |           |            |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                          | 13,13   | 13,14 | 18,21     | 11,[13],14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                         |         |       | 29.2,29.2 | [9],9.3    | 8,8   |
|        | 14,17                         | 11      |       |           |            |       |
| AGXWKM | Investigator® 24plex          |         |       |           |            |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
| 4sp    | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                         |         |       | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                         | 11      |       |           |            |       |

TABLE 1

| WebCode | 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

|        |                            |         |            |            |          |       |
|--------|----------------------------|---------|------------|------------|----------|-------|
| AJ2MUN | GlobalFiler™               |         |            |            |          |       |
|        | 14,16.3                    | 17,24   | 11,14      | 16,18      | 11,12    |       |
| 4sp    | 9,11                       | 13,13   | 13,14      | 18,21      | 11,14    | 11,12 |
|        | 16,17                      | 15,16.2 | 30,30      | 15,16      | X,Y      | 11,12 |
|        | 20,22                      |         |            | 29.2,29.2  | 9,9.3    | 8,8   |
|        | 14,17                      | 11      |            |            | 2        |       |
| APBNBL | PowerPlex® Fusion          |         |            |            |          |       |
|        | 14,16.3                    | 17,24   | 11,14      | 16,18      | 11,12    |       |
| 4sp    | 9,11                       | 13      | 13,14      | 18,21      | 11,14    | 11,12 |
|        | 16,17                      | 15,16.2 | 30         | 15,16      | X,Y      | 11,12 |
|        | 20,22                      | 12,14   | 10,14      |            | 9,9.3    | 8     |
|        | 14,17                      | 11      |            |            |          |       |
| ATNQTB | PowerPlex® Fusion 6C       |         |            |            |          |       |
|        | 14,16.3                    | 17,24   | 11,14      | 16,18      | 11,12    |       |
| 4sp    | 9,11                       | 13      | 13,14      | 18,21      | 11,13,14 | 11,12 |
|        | 16,17                      | 15,16.2 | 30         | 15,16      | X,Y      | 11,12 |
|        | 20,22                      | 12,14   | 10,14      | 29.2       | 9,9.3    | 8     |
|        | 14,17                      | 11      | 17         | 19         |          |       |
| AZB8WL | PowerPlex® Fusion 6C       |         |            |            |          |       |
|        | 14,16.3                    | 17,24   | 11,14      | 16,18      | 11,12    |       |
| 4sp    | 9,11                       | 13,13   | 13,14      | 18,21      | 11,14    | 11,12 |
|        | 16,17                      | 15,16.2 | 30,30      | 15,16      | X,Y      | 11,12 |
|        | 20,22                      | 12,14   | 10,14      | 29.2,29.2  | 9,9.3    | 8,8   |
|        | 14,17                      | 11      | 17         | 19         |          |       |
| B6LNKG | PowerPlex® Fusion          |         |            |            |          |       |
|        | 14,16.3                    | 17,24   | 11,14      | 16,18      | 11,12    |       |
| 4sp    | 9,11                       | 13      | 13,14      | 18,21      | 11,14    | 11,12 |
|        | 16,17                      | 15,16.2 | 30         | 15,16      | X,Y      | 11,12 |
|        | 20,22                      | 12,14   | 10,14      |            | 9,9.3    | 8     |
|        | 14,17                      | 11      |            |            |          |       |
| B6Y9DQ | GlobalFiler™ (STRmix v2.7) |         |            |            |          |       |
|        | 14,16.3                    | 17,24   | 11,14      | 16,18      | 11,12    |       |
| 4sp    | 9,11                       | 13      | 13,14      | 18,21      | 11,14    | 11,12 |
|        | 16,17                      | 15,16.2 | 30         | 15,16      | X,Y      | 11,12 |
|        | 20,22                      |         |            | 29.2       | 9,9.3    | 8     |
|        | 14,17                      | 11      |            |            | 2        |       |
| B6ZBXP | PowerPlex® 6C              |         |            |            |          |       |
|        | 14,16.3                    | 17,24   | 11,[12],14 | 16,18      | 11,12    |       |
| 4sp    | 9,11                       | 13,13   | 13,14      | 18,[20],21 | 11,14    | 11,12 |
|        | 16,17                      | 15,16.2 | 30,30      | 15,16      | X,Y      | 11,12 |
|        | 20,22                      | 12,14   | 10,14      | 29.2,29.2  | 9,9.3    | 8,8   |
|        | 14,17                      | 11      | 17         | 19         |          |       |

TABLE 1

| WebCode | 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**

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| BB6A8T | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 14,16.3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13,13 | 13,14 | 18,21 | 11,14 | 11,12 |
|  | 16,17 | 15,16.2 | 30,30 | 15,16 | X,Y | 11,12 |
|  | 20,22 | 12,14 | 10,14 | 29.2,29.2 | 9,9.3 | 8,8 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| BVBMYF | PowerPlex® Fusion |  |  |  |  |  |
|  | 14,16.3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13 | 13,14 | 18,21 | 11,14 | 11,12 |
|  | 16,17 | 15,16.2 | 30 | 15,16 | X,Y | 11,12 |
|  | 20,22 | 12,14 | 10,14 |  | 9,9.3 | 8 |
|  | 14,17 | 11 |  |  |  |  |
| BWBHTK | PowerPlex® Fusion 6C (STRmix) |  |  |  |  |  |
|  | 14,16.3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13,13 | 13,14 | 18,21 | 11,14 | 11,12 |
|  | 16,17 | 15,16.2 | 30,30 | 15,16 | X,Y | 11,12 |
|  | 20,22 | 12,14 | 10,14 | 29.2,29.2 | 9,9.3 | 8,8 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| BYBTHR | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 14,16.3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13,13 | 13,14 | 18,21 | 11,14 | 11,12 |
|  | 16,17 | 15,16.2 | 30,30 | 15,16 | X,Y | 11,12 |
|  | 20,22 | 12,14 | 10,14 | 29.2,29.2 | 9,9.3 | 8,8 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| BYUJM7 | PowerPlex® Fusion 6C (STRmix 2.6.3) |  |  |  |  |  |
|  | 14,16.3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13 | 13,14 | 18,21 | 11,14 | 11,12 |
|  | 16,17 | 15,16.2 | 30 | 15,16 | X,Y | 11,12 |
|  | 20,22 | 12,14 | 10,14 | 29.2 | 9,9.3 | 8 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| C3NZD6 | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 14,16.3 | 17,24 | 11,12,14 | 16,18 | 11,12 |  |
| 4sp | 9,10,11 | 10,13 | 13,14 | 18,21 | 11,13,14 | 9,11,12 |
|  | 13,16,17 | 13,15,16.2 | 30,32.2 | 15,16 | X,Y | 11,12 |
|  | 20,22 | 12,14 | 5,10,14 | 19,24.2,29.2 | 6,7,9,9.3 | 8,11 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| C4JHE7 | GlobalFiler™ (STRmix) |  |  |  |  |  |
|  | 14,16.3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13 | 13,14 | 18,21 | 11,14 | 11,12 |
|  | 16,17 | 15,16.2 | 30 | 15,16 | X,Y | 11,12 |
|  | 20,22 |  |  | 29.2 | 9,9.3 | 8 |
|  | 14,17 | 11 |  |  | 2 |  |

TABLE 1

| WebCode                | 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 |  |            |            |            |            |         |
| CYRCXJ                 | GlobalFiler™   |            |            |            |            |         |
|                        | 14,16.3  | 17,24      | 11,14      | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13,13      | 13,14      | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2    | 30,30      | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |            |            | 29.2,29.2  | 9,9.3      | 8,8     |
|                        | 14,17  | 11         |            |            | 2          |         |
| D8JYDL                 | GlobalFiler™ (STRmix)                                  |            |            |            |            |         |
|                        | 14,16.3  | 17,24      | 11,14      | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13         | 13,14      | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2    | 30         | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |            |            | 29.2       | 9,9.3      | 8       |
|                        | 14,17  | 11         |            |            | 2          |         |
| DHVD89                 | PowerPlex® Fusion 6C                                   |            |            |            |            |         |
|                        | 14,16.3  | 17,24      | 11,14      | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13,13      | 13,14      | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2    | 30,30      | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | 12,14      | 10,14      | 29.2,29.2  | 9,9.3      | 8,8     |
|                        | 14,17  | 11         | 17         | 19         |            |         |
| DK4N4C                 | GlobalFiler™   |            |            |            |            |         |
|                        | 14,16.3  | 17,24      | 11,14      | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13,13      | 13,14      | 18,[20],21 | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2    | 30,30      | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |            |            | 29.2,29.2  | 9,9.3      | 8,8     |
|                        | 14,17  | 11         |            |            | 2          |         |
| EHT7HK                 | Identifier® Plus                                       |            |            |            |            |         |
|                        |  | 17,24      |            | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13         |            |            | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2    | 30         |            | X,Y        | 11,12   |
|                        | 20,22  |            |            |            | 9,9.3      | 8       |
|                        | 14,17  |            |            |            |            |         |
| EM9GT4                 | GlobalFiler™ (STRmix)                                  |            |            |            |            |         |
|                        | 14,16.3  | 17,24      | 11,14      | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13         | 13,14      | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2    | 30         | 15,16      | X,Y        | 11,12   |
|                        | 20,22  |            |            | 29.2       | 9,9.3      | 8       |
|                        | 14,17  | 11         |            |            | 2          |         |
| EPD3PG                 | Investigator® 24plex                                   |            |            |            |            |         |
|                        | 14,16.3  | 17,24      | 11,14      | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13,13      | 13,14      | 18,21      | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2    | 30,30      | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | Not Tested | Not Tested | 29.2,29.2  | 9,9.3      | 8,8     |
|                        | 14,17  | 11         |            |            |            |         |

TABLE 1

| WebCode                | 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 |  |         |          |           |            |         |
| EQQN4P                 | PowerPlex® Fusion                                      |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    |           | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           |            |         |
| EU74PA                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |           | 2          |         |
| EVH3JJ                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |           | 2          |         |
| EWDLLK                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |
| EWUHDK                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |
| F3X4G8                 | GlobalFiler™ IQC (LRmixstudio-2.1.3)                   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |
| FB9639                 | PowerPlex® Fusion 6C, GlobalFiler™                     |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2      | 9,9.3      | 8       |
|                        | 14,17  | 11      | 17       | 19        | 2          |         |

TABLE 1

| WebCode                | 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 |  |         |          |            |            |         |
| FCJ62N                 | PowerPlex® Fusion 6C                                   |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2  | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19         |            |         |
| FFHGWN                 | PowerPlex® Fusion 6C                                   |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2  | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19         |            |         |
| FQLUXN                 | PowerPlex® Fusion                                      |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,[17],18 | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21      | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    |            | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |            |            |         |
| G7B4CD                 | PowerPlex® Fusion                                      |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    |            | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |            |            |         |
| G8BY6H                 | PowerPlex® Fusion 6C (STRmix)                          |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21      | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2  | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19         |            |         |
| GHP2H3                 | PowerPlex® Fusion 5C                                   |         |          |            |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,(13),14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    |            | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |            |            |         |
| GJZ8F4                 | PowerPlex® Fusion 6C                                   |         |          |            |            |         |
|                        | 14,16,16.3   | 17,24   | 11,14    | 16,18      | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,13,14   | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2       | 9,9.3      | 8       |
|                        | 14,17  | 11      | 17       | 19         |            |         |

TABLE 1

| WebCode | 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

|        |                       |         |       |           |            |       |
|--------|-----------------------|---------|-------|-----------|------------|-------|
| GQXUBA | PowerPlex® Fusion     |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                 | 12,14   | 10,14 |           | 9,9.3      | 8     |
|        | 14,17                 | 11      |       |           |            |       |
| GRRJT6 | PowerPlex® Fusion 5C  |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                 | 12,14   | 10,14 |           | 9,9.3      | 8     |
|        | 14,17                 | 11      |       |           |            |       |
| GUGRYZ | GlobalFiler™ (STRmix) |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                 | 11      |       |           | 2          |       |
| GWRMRJ | PowerPlex® 6C         |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13,13   | 13,14 | 18,21     | 11,[13],14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                 | 11      | 17    | 19        |            |       |
| GXLBAE | PowerPlex® Fusion 6C  |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                 | 11      | 17    | 19        |            |       |
| H42DQF | GlobalFiler™          |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                 |         |       | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                 | 11      |       |           | 2          |       |
| H4LAWN | GlobalFiler™          |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                 |         |       | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                 | 11      |       |           | 2          |       |

TABLE 1

| WebCode | 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

|        |                      |         |         |           |       |       |
|--------|----------------------|---------|---------|-----------|-------|-------|
| HBKL7Z | PowerPlex® Fusion 6C |         |         |           |       |       |
| 4sp    | 14,16.3              | 17,24   | 11,14   | 16,18     | 11,12 |       |
|        | 9,11                 | 13,13   | 13,14   | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30   | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14   | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      | 17      | 19        |       |       |
| HFFBQD | PowerPlex® Fusion    |         |         |           |       |       |
| 4sp    | 14,16.3              | 17,24   | 11,14   | 16,18     | 11,12 |       |
|        | 9,11                 | 13      | 13,14   | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30      | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14   |           | 9,9.3 | 8     |
|        | 14,17                | 11      |         |           |       |       |
| HXCZM8 | GlobalFiler™         |         |         |           |       |       |
| 4sp    | 14,16.3              | 17,24   | 11,14   | 16,18     | 11,12 |       |
|        | 9,11                 | 13,13   | 13,14   | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30   | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |         | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      |         |           | 2     |       |
| JXANJB | PowerPlex® Fusion 6C |         |         |           |       |       |
| 4sp    | 14,16.3              | 17,24   | 11,14   | 16,18     | 11,12 |       |
|        | 9,11                 | 13,13   | 13,14   | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30   | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14   | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      | 17      | 19        |       |       |
| K8C9JH | PowerPlex® Fusion 6C |         |         |           |       |       |
| 4sp    | 14,16.3              | 17,24   | 11,14   | 16,18     | 11,12 |       |
|        | 9,11                 | 13,13   | 13,14   | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30   | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 10,14   | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                | 11      | 17      | 19        |       |       |
| K9KKWD | GlobalFiler™         |         |         |           |       |       |
| 4sp    | 14,16.3              | 17,24   | 11,14   | 16,18     | 11,12 |       |
|        | 9,11                 | 13      | 13,14   | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30      | 15,16     | X,Y   | 11,12 |
|        | 20,22                |         |         | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      |         |           | 2     |       |
| KECM6K | PowerPlex® Fusion 6C |         |         |           |       |       |
| 4sp    | 14,16.3              | 17,24   | 11,14   | 16,18     | 11,12 |       |
|        | 9,11                 | 13      | 13,14   | 18,21     | 11,14 | 11,12 |
|        | 16,17                | 15,16.2 | 30      | 15,16     | X,Y   | 11,12 |
|        | 20,22                | 12,14   | 5,10,14 | 29.2      | 9,9.3 | 8     |
|        | 14,17                | 11      | 17      | 19        |       |       |

TABLE 1

|                               |                       | <b>Amplification Kits (Probabilistic Genotyping Software)</b> |                 |                 |                   |                |  |
|-------------------------------|-----------------------|---|-----------------|-----------------|-------------------|----------------|--|
| <b>Item</b>                   | <b>D1S1656</b>        | <b>D2S1338</b>  | <b>D2S441</b>   | <b>D3S1358</b>  | <b>D5S818</b>     | <b>D6S1043</b> |  |
|                               | <b>D7S820</b>         | <b>D8S1179</b>  | <b>D10S1248</b> | <b>D12S391</b>  | <b>D13S317</b>    | <b>D16S539</b> |  |
|                               | <b>D18S51</b>         | <b>D19S433</b>  | <b>D21S11</b>   | <b>D22S1045</b> | <b>Amelogenin</b> | <b>CSF1PO</b>  |  |
|                               | <b>FGA</b>            | <b>Penta D</b>  | <b>Penta E</b>  | <b>SE33</b>     | <b>TH01</b>       | <b>TPOX</b>    |  |
|                               | <b>vWA</b>            | <b>DYS391</b>   | <b>DYS570</b>   | <b>DYS576</b>   | <b>Y Indel</b>    |                |  |
| <b>Item 4sp - STR Results</b> |                       |   |                 |                 |                   |                |  |
| KUM9NA                        | GlobalFiler™          |   |                 |                 |                   |                |  |
|                               | 14,16.3               | 17,24   | 11,14           | 16,18           | 11,12             |                |  |
| 4sp                           | 9,11                  | 13  | 13,14           | 18,21           | 11,14             | 11,12          |  |
|                               | 16,17                 | 15,16.2   | 30              | 15,16           | X,Y               | 11,12          |  |
|                               | 20,22                 |   |                 | 29.2            | 9,9.3             | 8              |  |
|                               | 14,17                 | 11  |                 |                 | 2                 |                |  |
| KWTQQC                        | PowerPlex® Fusion 6C  |   |                 |                 |                   |                |  |
|                               | 14,16.3               | 17,24   | 11,14           | 16,18           | 11,12             |                |  |
| 4sp                           | 9,11                  | 13,13   | 13,14           | 18,21           | 11,14             | 11,12          |  |
|                               | 16,17                 | 15,16.2   | 30,30           | 15,16           | X,Y               | 11,12          |  |
|                               | 20,22                 | 12,14   | 10,14           | 29.2,29.2       | 9,9.3             | 8,8            |  |
|                               | 14,17                 | 11  | 17              | 19              |                   |                |  |
| KWVGYF                        | GlobalFiler™ (STRmix) |   |                 |                 |                   |                |  |
|                               | 14,16.3               | 17,24   | 11,14           | 16,18           | 11,12             |                |  |
| 4sp                           | 9,11                  | 13  | 13,14           | 18,20,21        | 11,13,14          | 11,12          |  |
|                               | 16,17                 | 15,16.2   | 30              | 15,16           | X,Y               | 11,12          |  |
|                               | 20,22                 |   |                 | 29.2            | 9,9.3             | 8              |  |
|                               | 14,17                 | 11  |                 |                 | 2                 |                |  |
| KY249D                        | PowerPlex® Fusion 6C  |   |                 |                 |                   |                |  |
|                               | 14,16.3               | 17,24   | 11,14           | 16,18           | 11,12             |                |  |
| 4sp                           | 9,11                  | 13,13   | 13,14           | 18,21           | 11,14             | 11,12          |  |
|                               | 16,17                 | 15,16.2   | 30,30           | 15,16           | X,Y               | 11,12          |  |
|                               | 20,22                 | 12,14   | 10,14           | 29.2,29.2       | 9,9.3             | 8,8            |  |
|                               | 14,17                 | 11  | 17              | 19              |                   |                |  |
| L66AJA                        | GlobalFiler™          |   |                 |                 |                   |                |  |
|                               | 14,16.3               | 17,24   | 11,14           | 16,18           | 11,12             |                |  |
| 4sp                           | 9,11                  | 13,13   | 13,14           | 18,21           | {11,14}           | {11,12}        |  |
|                               | 16,17                 | 15,16.2   | 30,30           | 15,16           | X,Y               | 11,12          |  |
|                               | 20,22                 |   |                 | 29.2,29.2       | 9,9.3             | 8,8            |  |
|                               | 14,17                 | 11  |                 |                 | 2                 |                |  |
| LB8JP3                        | GlobalFiler™          |   |                 |                 |                   |                |  |
|                               | 14,16.3               | 17,24   | 11,14           | 16,18           | 11,12             |                |  |
| 4sp                           | 9,11                  | 13  | 13,14           | 18,21           | 11,14             | 11,12          |  |
|                               | 16,17                 | 15,16.2   | 30              | 15,16           | X,Y               | 11,12          |  |
|                               | 20,22                 |   |                 | 29.2            | 9,9.3             | 8              |  |
|                               | 14,17                 | 11  |                 |                 | 2                 |                |  |
| LNY6XJ                        | PowerPlex® Fusion 6C  |   |                 |                 |                   |                |  |
|                               | 14,16.3               | 17,24   | 11,12,14        | 16,18           | 11,12             |                |  |
| 4sp                           | 9,11                  | 13  | 13,14           | 18,21           | 11,14             | 11,12          |  |
|                               | 16,17                 | 15,16.2   | 30              | 15,16           | X,Y               | 11,12          |  |
|                               | 20,22                 | 12,14   | 10,14           | 19,29.2         | 9,9.3             | 8              |  |
|                               | 14,17                 | 11  | 17              | 19              |                   |                |  |

TABLE 1

| WebCode                | 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 |  |         |          |           |            |         |
| LQ6LBG                 | PowerPlex® Fusion 6C                                   |         |          |           |            |         |
| 4sp                    | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
|                        | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19        |            |         |
| LTPF8G                 | PowerPlex® Fusion 6C                                   |         |          |           |            |         |
| 4sp                    | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
|                        | 9,11   | 13      | 13,14    | 18,21     | 11,13,14   | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2      | 9,9.3      | 8       |
|                        | 14,17  | 11      | 17       | 19        |            |         |
| LYYFPE                 | GlobalFiler™   |         |          |           |            |         |
| 4sp                    | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
|                        | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |           | 2          |         |
| M7VXEB                 | PowerPlex® Fusion 6C (STRmix)                          |         |          |           |            |         |
| 4sp                    | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
|                        | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19        |            |         |
| MBQFZG                 | GlobalFiler™ (STRMIX)                                  |         |          |           |            |         |
| 4sp                    | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
|                        | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |           | 2          |         |
| MGCKNB                 | GlobalFiler™   |         |          |           |            |         |
| 4sp                    | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
|                        | 9,11   | 13,13   | 13,14    | 18,21     | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30,[31]  | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |
| MHRUM4                 | GlobalFiler™ (STRmix)                                  |         |          |           |            |         |
| 4sp                    | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
|                        | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |

TABLE 1

| WebCode                | 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 |  |         |          |            |            |            |
| MUF32W                 | GlobalFiler™   |         |          |            |            |            |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |            |
| 4sp                    | 9,11   | 13      | 13,14    | 18,[20],21 | 11,[13],14 | 11,12,[13] |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12      |
|                        | 20,22  |         |          | 29.2       | 9,9.3      | 8          |
|                        | 14,17  | 11      |          |            | 2          |            |
| MW4GQ7                 | GlobalFiler™   |         |          |            |            |            |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |            |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21      | 11,14      | 11,12      |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        | 11,12      |
|                        | 20,22  |         |          | 29.2       | 9,9.3      | 8          |
|                        | 14,17  | 11      |          |            | 2          |            |
| NJD32X                 | GlobalFiler™   |         |          |            |            |            |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |            |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,[20],21 | 11,14      | 11,12      |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16      | X,Y        | 11,12      |
|                        | 20,22  |         |          | 29.2,29.2  | 9,9.3      | 8,8        |
|                        | 14,17  | 11      |          |            | 2          |            |
| PCEV4A                 | PowerPlex® Fusion 6C                                   |         |          |            |            |            |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |            |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21      | 11,14      | 11,12      |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16      | X,Y        | 11,12      |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2  | 9,9.3      | 8,8        |
|                        | 14,17  | 11      | 17       | 19         |            |            |
| PEYP2A                 | Investigator® 24plex (STRmix)                          |         |          |            |            |            |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |            |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21      | 11,14      | 11,12      |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16      | X,Y        | 11,12      |
|                        | 20,22  |         |          | 29.2,29.2  | 9,9.3      | 8,8        |
|                        | 14,17  | 11      |          |            |            |            |
| PK4GA8                 | PowerPlex® ESX 16 FAST                                 |         |          |            |            |            |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      |            |            |
| 4sp                    |  | 13      | 13,14    | 18,21      |            | 11,12      |
|                        | 16,17  | 15,16.2 | 30       | 15,16      | X,Y        |            |
|                        | 20,22  |         |          |            | 9,9.3      |            |
|                        | 14,17  |         |          |            |            |            |
| Q4UYT8                 | PowerPlex® Fusion 6C                                   |         |          |            |            |            |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18      | 11,12      |            |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21      | 11,(13),14 | 11,12      |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16      | X,Y        | 11,12      |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2  | 9,9.3      | 8,8        |
|                        | 14,17  | 11      | 17       | 19         |            |            |

TABLE 1

| WebCode | 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

|        |                               |         |       |           |            |       |
|--------|-------------------------------|---------|-------|-----------|------------|-------|
| QA2KPG | GlobalFiler™ (STRmix)         |         |       |           |            |       |
| 4sp    | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                          | 13      | 13,14 | 18,21     | 11,13,14   | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                         |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                         | 11      |       |           | 2          |       |
| QA2Z6H | GlobalFiler™                  |         |       |           |            |       |
| 4sp    | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                         |         |       | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                         | 11      |       |           | 2          |       |
| QBZX9  | GlobalFiler™                  |         |       |           |            |       |
| 4sp    | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                         |         |       | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                         | 11      |       |           | 2          |       |
| QVJWAR | PowerPlex® Fusion 5C          |         |       |           |            |       |
| 4sp    | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                          | 13      | 13,14 | 18,21     | 11,[13],14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3      | 8     |
|        | 14,17                         | 11      |       |           |            |       |
| QWR3T8 | PowerPlex® Fusion 6C (STRmix) |         |       |           |            |       |
| 4sp    | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                          | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                         | 12,14   | 10,14 | 29.2      | 9,9.3      | 8     |
|        | 14,17                         | 11      | 17    | 19        |            |       |
| QWX28Q | GlobalFiler™                  |         |       |           |            |       |
| 4sp    | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                          | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                         |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                         | 11      |       |           | 2          |       |
| QZELU7 | PowerPlex® Fusion 6C          |         |       |           |            |       |
| 4sp    | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                         | 12,14   | 10,14 | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                         | 11      | 17    | 19        |            |       |

TABLE 1

| WebCode                | 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 |  |         |          |           |            |         |
| R4PY8X                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |
| R8UK4B                 | PowerPlex® Fusion                                      |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    |           | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           |            |         |
| REB3J4                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |
| RNBZYQ                 | GlobalFiler™ (STRmix)                                  |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |           | 2          |         |
| RNCTWY                 | PowerPlex® Fusion                                      |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    |           | 9,9.3      | 8       |
|                        | 14,17  | 11      |          |           |            |         |
| RNYYGX                 | GlobalFiler™   |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,[13],14 | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      |          |           | 2          |         |
| RPBNQ3                 | PowerPlex® Fusion 6C (STRmix)                          |         |          |           |            |         |
|                        | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                    | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                        | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                        | 20,22  | 12,14   | 10,14    | 29.2,29.2 | 9,9.3      | 8,8     |
|                        | 14,17  | 11      | 17       | 19        |            |         |

TABLE 1

| WebCode | 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

|        |                      |         |       |           |            |       |
|--------|----------------------|---------|-------|-----------|------------|-------|
| RX4YXC | PowerPlex® Fusion    |         |       |           |            |       |
| 4sp    | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                | 12,14   | 10,14 |           | 9,9.3      | 8,8   |
|        | 14,17                | 11      |       |           |            |       |
| T8BX8E | GlobalFiler™         |         |       |           |            |       |
| 4sp    | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                 | 13      | 13,14 | 18,21     | 11,[13],14 | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                | 11      |       |           | 2          |       |
| TFG3XA | PowerPlex® Fusion 6C |         |       |           |            |       |
| 4sp    | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                | 12,14   | 10,14 | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                | 11      | 17    | 19        |            |       |
| TGVC34 | Investigator® 24plex |         |       |           |            |       |
| 4sp    | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                |         |       | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                | 11      |       |           | 2          |       |
| TLNE9N | GlobalFiler™         |         |       |           |            |       |
| 4sp    | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                 | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                | 11      |       |           | 2          |       |
| TXJHHA | PowerPlex® Fusion    |         |       |           |            |       |
| 4sp    | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                 | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                | 12,14   | 10,14 |           | 9,9.3      | 8,8   |
|        | 14,17                | 11      |       |           |            |       |
| TXY238 | PowerPlex® Fusion 6C |         |       |           |            |       |
| 4sp    | 14,16.3              | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                 | 13,13   | 13,14 | 18,21     | 11,[13],14 | 11,12 |
|        | 16,17                | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                | 12,14   | 10,14 | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                | 11      | 17    | 19        |            |       |

TABLE 1

| WebCode                       | 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    |         |
| <b>Item 4sp - STR Results</b> |  |         |          |           |            |         |
| U3C4P3                        | PowerPlex® 21 (STRmix)                                 |         |          |           |            |         |
|                               | 14,16.3  | 17,24   |          | 16,18     | 11,12      | 11,13   |
| 4sp                           | 9,11   | 13,13   |          | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30,30    |           | X,Y        | 11,12   |
|                               | 20,22  | 12,14   | 10,14    |           | 9,9.3      | 8,8     |
|                               | 14,17  |         |          |           |            |         |
| U6D6PZ                        | PowerPlex® Fusion 6C (STRmix)                          |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                               | 20,22  | 12,14   | 10,14    | 29.2,29.2 | 9,9.3      | 8,8     |
|                               | 14,17  | 11      | 17       | 19        |            |         |
| UXDWYY                        | GlobalFiler™ (STRmix)                                  |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                               | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                               | 14,17  | 11      |          |           | 2          |         |
| UYCTT3                        | Identifier® Plus                                       |         |          |           |            |         |
|                               |  | 17,24   |          | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13,13   |          |           | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30,30    |           | X,Y        | 11,12   |
|                               | 20,22  |         |          |           | 9,9.3      | 8,8     |
|                               | 14,17  |         |          |           |            |         |
| VJTE7                         | GlobalFiler™ (STRmix)                                  |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13      | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                               | 20,22  |         |          | 29.2      | 9,9.3      | 8       |
|                               | 14,17  | 11      |          |           | 2          |         |
| VTZA49                        | PowerPlex® Fusion 6C                                   |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13      | 13,14    | 18,21     | 11,13,14   | 11,12   |
|                               | 16,17  | 15,16.2 | 30       | 15,16     | X,Y        | 11,12   |
|                               | 20,22  | 12,14   | 10,14    | 29.2      | 9,9.3      | 8       |
|                               | 14,17  | 11      | 17       | 19        |            |         |
| W7K9A2                        | GlobalFiler™   |         |          |           |            |         |
|                               | 14,16.3  | 17,24   | 11,14    | 16,18     | 11,12      |         |
| 4sp                           | 9,11   | 13,13   | 13,14    | 18,21     | 11,14      | 11,12   |
|                               | 16,17  | 15,16.2 | 30,30    | 15,16     | X,Y        | 11,12   |
|                               | 20,22  |         |          | 29.2,29.2 | 9,9.3      | 8,8     |
|                               | 14,17  | 11      |          |           | 2          |         |

TABLE 1

| WebCode | 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

|        |                       |         |       |           |            |       |
|--------|-----------------------|---------|-------|-----------|------------|-------|
| WR3HAZ | PowerPlex® Fusion 6C  |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13,13   | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                 | 11      | 17    | 19        |            |       |
| X3DFN3 | Identifiler® Plus     |         |       |           |            |       |
| 4sp    |                       | 17,24   |       | 16,18     | 11,12      |       |
|        | 9,11                  | 13      |       |           | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30    |           | X,Y        | 11,12 |
|        | 20,22                 |         |       |           | 9,9.3      | 8     |
|        | 14,17                 |         |       |           |            |       |
| X8AW99 | GlobalFiler™          |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13      | 13,14 | 18,21     | 11,[13],14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                 | 11      |       |           | 2          |       |
| XC8DL3 | PowerPlex® Fusion 6C  |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13,13   | 13,14 | 18,21     | 11,[13],14 | 11,12 |
|        | 16,17                 | 15,16.2 | 30,30 | 15,16     | X,Y        | 11,12 |
|        | 20,22                 | 12,14   | 10,14 | 29.2,29.2 | 9,9.3      | 8,8   |
|        | 14,17                 | 11      | 17    | 19        |            |       |
| XCNGA3 | Identifiler® Plus     |         |       |           |            |       |
| 4sp    |                       | 17,24   |       | 16,18     | 11,12      |       |
|        | 9,11                  | 13      |       |           | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30    |           | X,Y        | 11,12 |
|        | 20,22                 |         |       |           | 9,9.3      | 8     |
|        | 14,17                 |         |       |           |            |       |
| XG38J4 | GlobalFiler™ (STRmix) |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                 | 11      |       |           | 2          |       |
| XGXR4H | GlobalFiler™          |         |       |           |            |       |
| 4sp    | 14,16.3               | 17,24   | 11,14 | 16,18     | 11,12      |       |
|        | 9,11                  | 13      | 13,14 | 18,21     | 11,14      | 11,12 |
|        | 16,17                 | 15,16.2 | 30    | 15,16     | X,Y        | 11,12 |
|        | 20,22                 |         |       | 29.2      | 9,9.3      | 8     |
|        | 14,17                 | 11      |       |           | 2          |       |

TABLE 1

| WebCode | 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

|        |                               |         |       |           |       |       |
|--------|-------------------------------|---------|-------|-----------|-------|-------|
| XNHTKV | PowerPlex® Fusion             |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 4sp    | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           |       |       |
| XPRVAZ | PowerPlex® Fusion 5C          |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 4sp    | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                         | 11      |       |           |       |       |
| XRWJUW | PowerPlex® Fusion 6C (STRmix) |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 4sp    | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                         | 11      | 17    | 19        |       |       |
| XU7FEZ | PowerPlex® Fusion 5C          |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 4sp    | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3 | 8,8   |
|        | 14,17                         | 11      |       |           |       |       |
| YCZL8R | GlobalFiler™                  |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 4sp    | 9,11                          | 13,13   | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30,30 | 15,16     | X,Y   | 11,12 |
|        | 20,22                         |         |       | 29.2,29.2 | 9,9.3 | 8,8   |
|        | 14,17                         | 11      |       |           | 2     |       |
| YRVV3K | GlobalFiler™ (STRmix)         |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 4sp    | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         |         |       | 29.2      | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           | 2     |       |
| YRXMZR | PowerPlex® Fusion             |         |       |           |       |       |
|        | 14,16.3                       | 17,24   | 11,14 | 16,18     | 11,12 |       |
| 4sp    | 9,11                          | 13      | 13,14 | 18,21     | 11,14 | 11,12 |
|        | 16,17                         | 15,16.2 | 30    | 15,16     | X,Y   | 11,12 |
|        | 20,22                         | 12,14   | 10,14 |           | 9,9.3 | 8     |
|        | 14,17                         | 11      |       |           |       |       |

TABLE 1

| WebCode | 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**

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| ZARTPX | PowerPlex® Fusion 6C (STRmix) |  |  |  |  |  |
|  | 14,16,3,18,3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13 | 13,14 | 18,21 | 11,13,14 | 11,12 |
|  | 16,17 | 13,15,16,2 | 30 | 15,16 | X,Y | 11,12 |
|  | 20,22 | 12,14 | 10,14 | 29,2 | 9,9,3 | 8 |
|  | 14,17 | 11 | 17 | 19 |  |  |
| ZAUM94 | PowerPlex® Fusion |  |  |  |  |  |
|  | 14,16,3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13,13 | 13,14 | 18,21 | 11,14 | 11,12 |
|  | 16,17 | 15,16,2 | 30,30 | 15,16 | X,Y | 11,12 |
|  | 20,22 | 12,14 | 10,14 |  | 9,9,3 | 8,8 |
|  | 14,17 | 11 |  |  |  |  |
| ZEH8BY | GlobalFiler™ |  |  |  |  |  |
|  | 14,16,3 | 17,24 | 11,14 | 16,18 | 11,12 | Not Tested |
| 4sp | 9,11 | 13,13 | 13,14 | 18,21 | 11,14 | 11,12 |
|  | 16,17 | 15,16,2 | 30,30 | 15,16 | X,Y | 11,12 |
|  | 20,22 | Not Tested | Not Tested | 29,2,29,2 | 9,9,3 | 8,8 |
|  | 14,17 | 11 | Not Tested | Not Tested | 2 |  |
| ZKAHKW | GlobalFiler™ (TrueAllele) |  |  |  |  |  |
|  | 14,16,3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13 | 13,14 | 18,21 | 11,14 | 11,12 |
|  | 16,17 | 15,16,2 | 30 | 15,16 | X,Y | 11,12 |
|  | 20,22 |  |  | 29,2 | 9,9,3 | 8 |
|  | 14,17 | 11 |  |  | 2 |  |
| ZWHZEL | GlobalFiler™ |  |  |  |  |  |
|  | 14,16,3 | 17,24 | 11,14 | 16,17,18 | 11,12 |  |
| 4sp | 9,11 | 13 | 13,14 | 18,21 | 11,13,14 | 11,12 |
|  | 16,17 | 15,16,2 | 30 | 15,16 | X,Y | 11,12 |
|  | 20,22 |  |  | 29,2 | 9,9,3 | 8 |
|  | 14,17 | 11 |  |  | 2 |  |
| ZYA44L | PowerPlex® Fusion 6C |  |  |  |  |  |
|  | 14,16,3,18,3 | 17,24 | 11,14 | 16,18 | 11,12 |  |
| 4sp | 9,11 | 13 | 13,14 | 18,21 | 11,13,14 | 11,12 |
|  | 16,17 | 15,16,2 | 30,31 | 15,16 | X,Y | 11,12 |
|  | 20,22 | 12,14 | 5,10,14 | 29,2 | 9,9,3 | 8 |
|  | 14,17 | 11 | 17 | 19 |  |  |

# **YSTR Amplification Kit(s) & Results**

TABLE 2

| WebCode | 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 | Y GATA H4 |

**Item 1 - YSTR Results**

X3DFN3      Yfiler™

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
|   | - | - | - | - | - | - | - | - | - |
| 1 | - | - | - | - | - | - | - | - | - |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 2 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| 2JRNH2                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| 2TUB6R                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| 2VNYNN                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| 3BW84H                       | PowerPlex® Y 23 |                          |               | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| 4EQNTG                       | PowerPlex® Y 23 |                          |               | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| 4GD3HQ                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| 4NEG6D                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| 4X46XU                       | Yfiler™         |                          |               | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          |               |                 |                  |               |               | 23            |                  | 13 |
| 4YWYXK                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| 66H4ER                       | Yfiler™         |                          |               | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          |               |                 |                  |               |               | 23            |                  | 13 |
| 69HFAR                       | Yfiler™         |                          |               | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          |               |                 |                  |               |               | 23            |                  | 13 |
| 6JJRHE                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |  |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|--|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |  |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |  |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |  |
| <b>Item 2 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |  |
| 6K9DTG                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 7A93XE                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |  |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |  |
|                              |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            | 13               |  |
| 7HHCMT                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| 7KLAUF                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| 7KM3RM                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 7RQ4RG                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 7VRGN3                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 8DQFJN                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| 97JFFC                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |  |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |  |
|                              |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            | 13               |  |
| 9DG8LK                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 9LAHWF                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 9NXWKP                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |  |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|--|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |  |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |  |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |  |
| <b>Item 2 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |  |
| 9PWWNV                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| 9QAJ6P                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| 9ZEG6L                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               |                  |  |
| A6LKEK                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| A9Z4B9                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               |                  |  |
| ADY9CT                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            | 13               |  |
| APBNBL                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               |                  |  |
| ATNQTB                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| AZB8WL                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| B6LNKG                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               |                  |  |
| BB6A8T                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| BVBMYF                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               |                  |  |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 2 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| BWBHTK                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| BYBTHR                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| C3NZD6                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| C4JHE7                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 30            | 15            | 17            | 11               | 22 |
|                              |                 |                          | 38            | 12              |                  | 17            | 19            | 23            |                  | 13 |
| CYRCXJ                       | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  |               | 15            | 17            |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| DHVD89                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  |               | 15            | 17            |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| DK4N4C                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 30            | 15            | 17            | 11               | 22 |
|                              |                 |                          | 38            | 12              |                  | 17            | 19            | 23            |                  | 13 |
| EHT7HK                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  |               | 15            | 17            |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| EM9GT4                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 30            | 15            | 17            | 11               | 22 |
|                              |                 |                          | 38            | 12              |                  | 17            | 19            | 23            |                  | 13 |
| EPD3PG                       | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  |               | 15            | 17            |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| EQQN4P                       | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  |               | 15            | 17            |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| EU74PA                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 30            | 15            | 17            | 11               | 22 |
|                              |                 |                          | 38            | 12              |                  | 17            | 19            | 23            |                  | 13 |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 2 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| EVH3JJ                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| EWUHDK                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| FB9639                       | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| FCJ62N                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| FFHGWN                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| FQLUXN                       | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| G7B4CD                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| G8BY6H                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| GJZ8F4                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| GQXUBA                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| GUGRYZ                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| GXLBAE                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 2 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| HBKL7Z                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 13 |
| HFFBQD                       |                 | Yfiler™ Plus             |               |                 |                  |               |               |               |                  |    |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               |                  | 13 |
| HXCZM8                       |                 | Yfiler™ Plus             |               |                 |                  |               |               |               |                  |    |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               |                  | 13 |
| K8C9JH                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 13 |
|                              |                 |                          |               |                 |                  |               | 23            |               |                  | 13 |
| K9KKWD                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 13 |
|                              |                 |                          |               |                 |                  |               | 23            |               |                  | 13 |
| KECM6K                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 13 |
|                              |                 |                          |               |                 |                  |               | 23            |               |                  | 13 |
| KUM9NA                       |                 | Yfiler™ Plus             |               |                 |                  |               |               |               |                  |    |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               |                  | 13 |
| KWTQQC                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 13 |
|                              |                 |                          |               |                 |                  |               | 23            |               |                  | 13 |
| L66AJA                       |                 | PowerPlex® Y 23          |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            |                  | 13 |
| LH89HM                       |                 |                          |               |                 |                  |               |               |               |                  |    |
| 2                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               |                  | 13 |
| LNY6XJ                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 13 |
|                              |                 |                          |               |                 |                  |               | 23            |               |                  | 13 |
| LQ6LBG                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
|                              | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 13 |
|                              |                 |                          |               |                 |                  |               | 23            |               |                  | 13 |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |  |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|--|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |  |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |  |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |  |
| <b>Item 2 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |  |
| LTPF8G                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| MHRUM4                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| MW4GQ7                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| NJD32X                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | [22.2],23     | 23            |               | 13               |  |
| PEYP2A                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |  |
|                              |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            | 13               |  |
| QWR3T8                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| QWX28Q                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| QZELU7                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                              |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| R4PY8X                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | [18],19         | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| R8UK4B                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |  |
|                              |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            | 13               |  |
| REB3J4                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| RNBZYQ                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                              | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 2 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| RNCTWY                       |                 | Yfiler™ Plus             |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 35,36                    | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               | 30            | 15            | 17            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| RNYYGX                       |                 | Yfiler™ Plus             |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 35,36                    | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               | 30            | 15            | 17            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| RPNBQ3                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               |               | 15            | 17            |                  |    |
|                              |                 |                          |               |                 |                  |               |               | 23            |                  | 13 |
| RX4YXC                       |                 | PowerPlex® Y 23          |               |                 |                  |               |               |               |                  |    |
| 2                            |                 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               |               | 15            | 17            |                  |    |
|                              |                 |                          |               |                 |                  |               |               | 23            |                  | 13 |
| TGF3XA                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               |               | 15            | 17            |                  |    |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| TLNE9N                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               |               | 15            | 17            |                  |    |
|                              |                 |                          |               |                 |                  |               |               | 23            |                  | 13 |
| TXJHHA                       |                 | PowerPlex® Y 23          |               |                 |                  |               |               |               |                  |    |
| 2                            |                 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               |               | 15            | 17            |                  |    |
|                              |                 |                          |               |                 |                  |               |               | 23            |                  | 13 |
| U6D6PZ                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               |               | 15            | 17            |                  |    |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| UXDWYY                       |                 | Yfiler™ Plus             |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 35,36                    | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               | 30            | 15            | 17            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| VHXLXC                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 | 35,36                    | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               | 30            | 15            | 17            | 11               | 22 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| VTZA49                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 2                            |                 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               |               | 15            | 17            |                  |    |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| WHRQRC                       |                 | PowerPlex® Y 23          |               |                 |                  |               |               |               |                  |    |
| 2                            |                 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
|                              |                 | 15                       | 12            | 12              | 19               |               | 15            | 17            |                  |    |
|                              |                 |                          |               |                 |                  |               |               | 23            |                  | 13 |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 2 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| WR3HAZ                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| WWE77P                       | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| X3DFN3                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| XCNGA3                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| XGXR4H                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| XNHTKV                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 14               | 12 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 22 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| XRWJUW                       | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| YRVV3K                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 14               | 12 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 22 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| YRXMZR                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 14               | 12 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 22 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| ZAUM94                       | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| ZKAHKW                       | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 2                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 14               | 12 |
|                              |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 22 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| ZWHZEL                       | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 2                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                              |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |

TABLE 2

| WebCode | 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 | Y GATA H4 |
| ZYA44L  | Yfiler™           |        |        |          |           |        |        |        |           |
| 2       |                   | 14     | 11,14  | 13       | 29        | 24     | 11     | 14     | 12        |
|         | 15                | 12     | 12     | 19       |           | 15     | 17     |        |           |
|         |                   |        |        |          |           | 23     |        |        | 13        |

## Item 2 - YSTR Results

|        |         |    |       |    |    |    |    |    |    |
|--------|---------|----|-------|----|----|----|----|----|----|
| ZYA44L | Yfiler™ |    |       |    |    |    |    |    |    |
| 2      |         | 14 | 11,14 | 13 | 29 | 24 | 11 | 14 | 12 |
|        | 15      | 12 | 12    | 19 |    | 15 | 17 |    |    |
|        |         |    |       |    |    | 23 |    |    | 13 |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 3 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| 2JRNH2                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |    |
| 2TUB6R                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 37,40                    | 14            | 16              | 13               | 29            | 25            | 10            | 13               | 12 |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |    |
|                              |                 | 41                       | 12            |                 | 19               | 20            | 21            | 21            |                  | 10 |
| 2VNYNN                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 37,40                    | 14            | 16,16           | 13               | 29            | 25            | 10            | 13               | 12 |
| 3                            | 14              | 11                       | 10            | (19),20         | 28               | 17            | 16.2          | 11            | 26               |    |
|                              |                 | 41                       | 12            |                 | 19               | 20            | 21            | 21            |                  | 10 |
| 3EY27T                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |    |
| 4EQNTG                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               | 26               |    |
|                              |                 | 12                       | 12            | 19              | 20               |               | 21            | 9             | 10               |    |
| 4GD3HQ                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 37,40                    | 14            | 16              | 13               | 29            | 25            | 10            | 13               | 12 |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |    |
|                              |                 | 41                       | 12            |                 | 19               | 20            | 21            | 21            |                  | 10 |
| 4NEG6D                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 37,40                    | 14            | 16              | 13               | 29            | 25            | 10            | 13               | 12 |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |    |
|                              |                 | 41                       | 12            |                 | 19               | 20            | 21            | 21            |                  | 10 |
| 4X46XU                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |    |
| 4YWYXK                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 37,40                    | 14            | 16,16           | 13               | 29            | 25            | 10            | 13               | 12 |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |    |
|                              |                 | 41                       | 12            |                 | 19               | 20            | 21            | 21            |                  | 10 |
| 66H4ER                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |    |
| 69HFAR                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |    |
| 6JJRHE                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 37,40                    | 14            | 16              | 13               | 29            | 25            | 10            | 13               | 12 |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |    |
|                              |                 | 41                       | 12            |                 | 19               | 20            | 21            | 21            |                  | 10 |

TABLE 2

| WebCode               |                 | 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 | DYS481 | Y GATA H4 |
| Item 3 - YSTR Results |                 |                   |        |          |           |        |        |        |        |           |
| 6K9DTG                | Yfiler™ Plus    |                   |        |          |           |        |        |        |        |           |
| 3                     | 37,40           | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14              | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41              | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| 7A93XE                | PowerPlex® Y 23 |                   |        |          |           |        |        |        |        |           |
| 3                     |                 | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |                 | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        | 26        |
|                       |                 | 12                | 12     | 19       | 20        |        | 21     | 9      |        | 10        |
| 7HHCMT                | Yfiler™         |                   |        |          |           |        |        |        |        |           |
| 3                     |                 | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |                 | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |                 | 21                |        |          |           |        |        |        |        | 10        |
| 7KLAUF                | Yfiler™         |                   |        |          |           |        |        |        |        |           |
| 3                     |                 | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |                 | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |                 | 21                |        |          |           |        |        |        |        | 10        |
| 7KM3RM                | Yfiler™ Plus    |                   |        |          |           |        |        |        |        |           |
| 3                     | 37,40           | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14              | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41              | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| 7RQ4RG                | Yfiler™ Plus    |                   |        |          |           |        |        |        |        |           |
| 3                     | 37,40           | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14              | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41              | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| 7VRGN3                | Yfiler™ Plus    |                   |        |          |           |        |        |        |        |           |
| 3                     | 37,40           | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14              | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41              | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| 8DQFJN                | Yfiler™         |                   |        |          |           |        |        |        |        |           |
| 3                     |                 | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |                 | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |                 | 21                |        |          |           |        |        |        |        | 10        |
| 9DG8LK                | Yfiler™ Plus    |                   |        |          |           |        |        |        |        |           |
| 3                     | 37,40           | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14              | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41              | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| 9LAHWF                |                 |                   |        |          |           |        |        |        |        |           |
| 3                     | 37,40           | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14              | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41              | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| 9NXWKP                | Yfiler™         |                   |        |          |           |        |        |        |        |           |
| 3                     |                 | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |                 | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |                 | 21                |        |          |           |        |        |        |        | 10        |
| 9PWWNV                | Yfiler™         |                   |        |          |           |        |        |        |        |           |
| 3                     |                 | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |                 | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |                 | 21                |        |          |           |        |        |        |        | 10        |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |  |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|--|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |  |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |  |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |  |
| <b>Item 3 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |  |
| 9QAJ6P                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |  |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |  |
| 9ZEG6L                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 37,40           | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |  |
|                              | 41              | 12                       |               | 19              | 20               | 21            | 21            |               | 10               |  |
| A6LKEK                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |  |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |  |
| A9Z4B9                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 37,40           | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |  |
|                              | 41              | 12                       |               | 19              | 20               | 21            | 21            |               | 10               |  |
| ADY9CT                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               | 26               |  |
|                              |                 | 12                       | 12            | 19              | 20               |               | 21            | 9             | 10               |  |
| APBNBL                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 37,40           | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |  |
|                              | 41              | 12                       |               | 19              | 20               | 21            | 21            |               | 10               |  |
| ATNQTB                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |  |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |  |
| AZB8WL                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |  |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |  |
| B6LNKG                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 37,40           | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |  |
|                              | 41              | 12                       |               | 19              | 20               | 21            | 21            |               | 10               |  |
| BB6A8T                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |  |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |  |
| BVBMYF                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                              | 37,40           | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            | 26               |  |
|                              | 41              | 12                       |               | 19              | 20               | 21            | 21            |               | 10               |  |
| BWBHTK                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |  |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |  |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |  |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 3 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| BYBTHR                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |    |
| C3NZD6                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |    |
| CYRCXJ                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 | 12                       | 12            | 19              | 20               |               | 21            | 9             | 10               |    |
| DHVD89                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |    |
| DK4N4C                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 37,40                    | 14            | 16,16           | 13               | 29            | 25            | 10            | 13               | 12 |
| 3                            | 14              | 11                       | 10            | 20              |                  | 28            | 17            | 16.2          | 11               | 26 |
|                              |                 | 41                       | 12            |                 | 19               | 20            |               | 21            |                  | 10 |
| EHT7HK                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  | 17            | 16.2          |               |                  |    |
|                              |                 |                          |               |                 |                  | 21            |               |               | 10               |    |
| EPD3PG                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  |               | 17            | 16.2          |                  | 26 |
|                              |                 | 12                       | 12            | 19              | 20               |               |               | 21            | 9                | 10 |
| EQQN4P                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  |               | 17            | 16.2          |                  | 26 |
|                              |                 | 12                       | 12            | 19              | 20               |               |               | 21            | 9                | 10 |
| EU74PA                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 37,40                    | 14            | 16              | 13               | 29            | 25            | 10            | 13               | 12 |
| 3                            | 14              | 11                       | 10            | 20              |                  | 28            | 17            | 16.2          | 11               | 26 |
|                              |                 | 41                       | 12            |                 | 19               | 20            |               | 21            |                  | 10 |
| EVH3JJ                       | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  |               | 17            | 16.2          |                  |    |
|                              |                 |                          |               |                 |                  |               | 21            |               |                  | 10 |
| EWUHDK                       | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 37,40                    | 14            | 16,16           | 13               | 29            | 25            | 10            | 13               | 12 |
| 3                            | 14              | 11                       | 10            | 20              |                  | 28            | 17            | 16.2          | 11               | 26 |
|                              |                 | 41                       | 12            |                 | 19               | 20            |               | 21            |                  | 10 |
| FB9639                       | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
|                              |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
| 3                            | 14              | 11                       | 10            | 20              |                  |               | 17            | 16.2          |                  | 26 |
|                              |                 | 12                       | 12            | 19              | 20               |               |               | 21            | 9                | 10 |

TABLE 2

| Item                  | Amplification Kit |        |        |          |           |        |        |        |        |           |
|-----------------------|-------------------|--------|--------|----------|-----------|--------|--------|--------|--------|-----------|
|                       | DYF387S1          | DYS19  | DYS385 | DYS389-I | DYS389-II | DYS390 | DYS391 | DYS392 | DYS393 |           |
|                       | DYS437            | DYS438 | DYS439 | DYS448   | DYS449    | DYS456 | DYS458 | DYS460 | DYS481 | Y GATA H4 |
|                       | DYS518            | DYS533 | DYS549 | DYS570   | DYS576    | DYS627 | DYS635 | DYS643 | DYS481 |           |
| Item 3 - YSTR Results |                   |        |        |          |           |        |        |        |        |           |
| FCJ62N                | Yfiler™           |        |        |          |           |        |        |        |        |           |
| 3                     | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| FFHGWN                | Yfiler™           |        |        |          |           |        |        |        |        |           |
| 3                     | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| FQLUXN                | PowerPlex® Y 23   |        |        |          |           |        |        |        |        |           |
| 3                     | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 12                | 12     | 19     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| G7B4CD                | Yfiler™ Plus      |        |        |          |           |        |        |        |        |           |
| 3                     | 37,40             | 14     | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14                | 11     | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41                | 12     | 19     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| G8BYH                 | Yfiler™           |        |        |          |           |        |        |        |        |           |
| 3                     | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| GJZ8F4                | Yfiler™           |        |        |          |           |        |        |        |        |           |
| 3                     | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| GQXUBA                | Yfiler™ Plus      |        |        |          |           |        |        |        |        |           |
| 3                     | 37,40             | 14     | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14                | 11     | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41                | 12     | 19     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| GUGRYZ                | Yfiler™ Plus      |        |        |          |           |        |        |        |        |           |
| 3                     | 37,40             | 14     | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14                | 11     | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41                | 12     | 19     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| GXLBAE                | Yfiler™           |        |        |          |           |        |        |        |        |           |
| 3                     | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| HBKL7Z                | Yfiler™           |        |        |          |           |        |        |        |        |           |
| 3                     | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14                | 11     | 10     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| HFFBQD                | Yfiler™ Plus      |        |        |          |           |        |        |        |        |           |
| 3                     | 37,40             | 14     | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14                | 11     | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41                | 12     | 19     | 20       | 29        | 25     | 10     | 13     | 12     |           |
| HXCZM8                | Yfiler™ Plus      |        |        |          |           |        |        |        |        |           |
| 3                     | 37,40             | 14     | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14                | 11     | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41                | 12     | 19     | 20       | 29        | 25     | 10     | 13     | 12     |           |

TABLE 2

| WebCode               |                 | 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 | DYS481 | Y GATA H4 |
| Item 3 - YSTR Results |                 |                   |        |          |           |        |        |        |        |           |
| K8C9JH                | Yfiler™         |                   | 14     | 16,16    | 13        | 29     | 25     | 10     | 13     | 12        |
| 3                     | 14              | 11                | 10     | 20       |           | 17     | 16.2   |        |        |           |
|                       |                 |                   |        |          |           | 21     |        |        |        | 10        |
| K9KKWD                | Yfiler™         |                   | 14     | 16       | 13        | 29     | 25     | 10     | 13     | 12        |
| 3                     | 14              | 11                | 10     | 20       |           | 17     | 16.2   |        |        |           |
|                       |                 |                   |        |          |           | 21     |        |        |        | 10        |
| KECM6K                | Yfiler™         |                   | 14     | 16,16    | 13        | 29     | 25     | 10     | 13     | 12        |
| 3                     | 14              | 11                | 10     | 20       |           | 17     | 16.2   |        |        |           |
|                       |                 |                   |        |          |           | 21     |        |        |        | 10        |
| KUM9NA                | Yfiler™ Plus    |                   | 37,40  | 14       | 16        | 13     | 29     | 25     | 10     | 13        |
| 3                     | 14              | 11                | 10     | 20       |           | 28     | 17     | 16.2   | 11     | 26        |
|                       |                 | 41                | 12     |          | 19        | 20     | 21     | 21     |        | 10        |
| KWTQQC                | Yfiler™         |                   | 14     | 16,16    | 13        | 29     | 25     | 10     | 13     | 12        |
| 3                     | 14              | 11                | 10     | 20       |           | 17     | 16.2   |        |        |           |
|                       |                 |                   |        |          |           | 21     |        |        |        | 10        |
| LNY6XJ                | Yfiler™         |                   | 14     | 16,16    | 13        | 29     | 25     | 10     | 13     | 12        |
| 3                     | 14              | 11                | 10     | 20       |           | 17     | 16.2   |        |        |           |
|                       |                 |                   |        |          |           | 21     |        |        |        | 10        |
| LQ6LBG                | Yfiler™         |                   | 14     | 16,16    | 13        | 29     | 25     | 10     | 13     | 12        |
| 3                     | 14              | 11                | 10     | 20       |           | 17     | 16.2   |        |        |           |
|                       |                 |                   |        |          |           | 21     |        |        |        | 10        |
| LTPF8G                | Yfiler™         |                   | 14     | 16,16    | 13        | 29     | 25     | 10     | 13     | 12        |
| 3                     | 14              | 11                | 10     | 20       |           | 17     | 16.2   |        |        |           |
|                       |                 |                   |        |          |           | 21     |        |        |        | 10        |
| MHRUM4                | Yfiler™ Plus    |                   | 37,40  | 14       | 16        | 13     | 29     | 25     | 10     | 13        |
| 3                     | 14              | 11                | 10     | 20       |           | 28     | 17     | 16.2   | 11     | 26        |
|                       |                 | 41                | 12     |          | 19        | 20     | 21     | 21     |        | 10        |
| MW4GQ7                | Yfiler™ Plus    |                   | 37,40  | 14       | 16        | 13     | 29     | 25     | 10     | 13        |
| 3                     | 14              | 11                | 10     | 20       |           | 28     | 17     | 16.2   | 11     | 26        |
|                       |                 | 41                | 12     |          | 19        | 20     | 21     | 21     |        | 10        |
| NJD32X                | Yfiler™ Plus    |                   | 37,40  | 14       | 16,16     | 13     | 29     | 25     | 10     | 13        |
| 3                     | 14              | 11                | 10     | 20       |           | 28     | 17     | 16.2   | 11     | 26        |
|                       |                 | 41                | 12     |          | 19        | 20     | 21     | 21     |        | 10        |
| PEYP2A                | PowerPlex® Y 23 |                   | 14     | 16,16    | 13        | 29     | 25     | 10     | 13     | 12        |
| 3                     | 14              | 11                | 10     | 20       |           |        | 17     | 16.2   |        | 26        |
|                       |                 |                   | 12     | 12       | 19        | 20     |        | 21     | 9      | 10        |

TABLE 2

| WebCode               |          | 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 | DYS481 | Y GATA H4 |
| Item 3 - YSTR Results |          |                   |        |          |           |        |        |        |        |           |
| QWR3T8                |          | Yfiler™ Plus      |        |          |           |        |        |        |        |           |
| 3                     | 37,40    | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14       | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41       | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| QWX28Q                |          | Yfiler™           |        |          |           |        |        |        |        |           |
| 3                     |          | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |          | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |          |                   |        |          |           |        | 21     |        | 10     |           |
| QZELU7                |          | Yfiler™           |        |          |           |        |        |        |        |           |
| 3                     |          | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |          | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |          |                   |        |          |           |        | 21     |        | 10     |           |
| R4PY8X                |          | Yfiler™ Plus      |        |          |           |        |        |        |        |           |
| 3                     | 37,40    | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14       | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41       | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| R8UK4B                |          | PowerPlex® Y 23   |        |          |           |        |        |        |        |           |
| 3                     |          | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |          | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |          |                   | 12     | 19       | 20        |        | 21     | 9      | 10     |           |
| REB3J4                |          | Yfiler™ Plus      |        |          |           |        |        |        |        |           |
| 3                     | 37,40    | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14       | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41       | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| RNCTWY                |          | Yfiler™ Plus      |        |          |           |        |        |        |        |           |
| 3                     | 37,40    | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14       | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41       | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| RNYYGX                |          | Yfiler™ Plus      |        |          |           |        |        |        |        |           |
| 3                     | 37,40    | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       | 14       | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26     |           |
|                       | 41       | 12                |        | 19       | 20        | 21     | 21     |        | 10     |           |
| RPBNQ3                |          | Yfiler™           |        |          |           |        |        |        |        |           |
| 3                     |          | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |          | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |          |                   |        |          |           |        | 21     |        | 10     |           |
| RX4YXC                |          | PowerPlex® Y 23   |        |          |           |        |        |        |        |           |
| 3                     |          | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |          | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |          |                   | 12     | 19       | 20        |        | 21     | 9      | 10     |           |
| TGF3XA                |          | Yfiler™           |        |          |           |        |        |        |        |           |
| 3                     |          | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |          | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |          |                   |        |          |           |        | 21     |        | 10     |           |
| TLNE9N                |          | Yfiler™           |        |          |           |        |        |        |        |           |
| 3                     |          | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12     |           |
|                       |          | 14                | 11     | 10       | 20        |        | 17     | 16.2   |        |           |
|                       |          |                   |        |          |           |        | 21     |        | 10     |           |

TABLE 2

| <b>WebCode</b>               |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                  | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                              | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                              | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 3 - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| TXJHHA                       |                 | PowerPlex® Y 23          |               |                 |                  |               |               |               |                  |    |
| 3                            |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              |                 | 14                       | 11            | 10              | 20               | 17            | 16.2          |               |                  | 26 |
|                              |                 | 12                       | 12            | 19              | 20               |               | 21            | 9             |                  | 10 |
| U6D6PZ                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 3                            |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              |                 | 14                       | 11            | 10              | 20               | 17            | 16.2          |               |                  | 21 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 10 |
| UXDWYY                       |                 | Yfiler™ Plus             |               |                 |                  |               |               |               |                  |    |
| 3                            | 37,40           | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            |                  | 26 |
|                              | 41              | 12                       |               | 19              | 20               | 21            | 21            |               |                  | 10 |
| VHXLXC                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 3                            | 37,40           | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            |                  | 26 |
|                              | 41              | 12                       |               | 19              | 20               | 21            | 21            |               |                  | 10 |
| VTZA49                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 3                            |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              |                 | 14                       | 11            | 10              | 20               | 17            | 16.2          |               |                  | 21 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 10 |
| WHRQRC                       |                 | PowerPlex® Y 23          |               |                 |                  |               |               |               |                  |    |
| 3                            |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              |                 | 14                       | 11            | 10              | 20               | 17            | 16.2          |               |                  | 26 |
|                              |                 | 12                       | 12            | 19              | 20               |               | 21            | 9             |                  | 10 |
| WR3HAZ                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 3                            |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              |                 | 14                       | 11            | 10              | 20               | 17            | 16.2          |               |                  | 21 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 10 |
| WWE77P                       |                 | PowerPlex® Y 23          |               |                 |                  |               |               |               |                  |    |
| 3                            |                 | 14                       | 16,16         | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              |                 | 14                       | 11            | 10              | 20               | 17            | 16.2          |               |                  | 26 |
|                              |                 | 12                       | 12            | 19              | 20               |               | 21            | 9             |                  | 10 |
| X3DFN3                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 3                            |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              |                 | 14                       | 11            | 10              | 20               | 17            | 16.2          |               |                  | 21 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 10 |
| XCNGA3                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 3                            |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              |                 | 14                       | 11            | 10              | 20               | 17            | 16.2          |               |                  | 21 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 10 |
| XGXR4H                       |                 | Yfiler™                  |               |                 |                  |               |               |               |                  |    |
| 3                            |                 | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              |                 | 14                       | 11            | 10              | 20               | 17            | 16.2          |               |                  | 21 |
|                              |                 |                          |               |                 |                  |               |               |               |                  | 10 |
| XNHTKV                       |                 | Yfiler™ Plus             |               |                 |                  |               |               |               |                  |    |
| 3                            | 37,40           | 14                       | 16            | 13              | 29               | 25            | 10            | 13            | 12               |    |
|                              | 14              | 11                       | 10            | 20              | 28               | 17            | 16.2          | 11            |                  | 26 |
|                              | 41              | 12                       |               | 19              | 20               | 21            | 21            |               |                  | 10 |

TABLE 2

| WebCode               |          | 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 | Y GATA H4 |  |
| Item 3 - YSTR Results |          |                   |        |          |           |        |        |        |           |  |
| XRWJUW                |          | Yfiler™           |        |          |           |        |        |        |           |  |
| 3                     |          | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12        |  |
|                       |          | 14                | 11     | 10       | 20        | 17     | 16.2   |        |           |  |
|                       |          |                   |        |          |           | 21     |        |        | 10        |  |
| YRXMZR                |          | Yfiler™ Plus      |        |          |           |        |        |        |           |  |
| 3                     | 37,40    | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12        |  |
|                       | 14       | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26        |  |
|                       | 41       | 12                |        | 19       | 20        | 21     | 21     |        | 10        |  |
| ZAUM94                |          | PowerPlex® Y 23   |        |          |           |        |        |        |           |  |
| 3                     |          | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12        |  |
|                       |          | 14                | 11     | 10       | 20        | 17     | 16.2   |        | 26        |  |
|                       |          |                   | 12     | 12       | 19        | 20     | 21     | 9      | 10        |  |
| ZKAHKW                |          | Yfiler™ Plus      |        |          |           |        |        |        |           |  |
| 3                     | 37,40    | 14                | 16     | 13       | 29        | 25     | 10     | 13     | 12        |  |
|                       | 14       | 11                | 10     | 20       | 28        | 17     | 16.2   | 11     | 26        |  |
|                       | 41       | 12                |        | 19       | 20        | 21     | 21     |        | 10        |  |
| ZYA44L                |          | Yfiler™           |        |          |           |        |        |        |           |  |
| 3                     |          | 14                | 16,16  | 13       | 29        | 25     | 10     | 13     | 12        |  |
|                       |          | 14                | 11     | 10       | 20        | 17     | 16.2   |        |           |  |
|                       |          |                   |        |          |           | 21     |        |        | 10        |  |

TABLE 2

| WebCode               |          | 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 | Y GATA H4 |    |
| Item 4 - YSTR Results |          |                   |        |          |           |        |        |        |           |    |
| 7VRGN3                |          | Yfiler™ Plus      |        |          |           |        |        |        |           |    |
| 4                     |          | 35,36             | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
|                       |          | 15                | 12     | 12       | 19        | 30     | 15     | 17     | 11        | 22 |
|                       |          | 38                | 12     |          | 17        | 19     | 23     | 23     |           | 13 |
| VHXLXC                |          | Yfiler™           |        |          |           |        |        |        |           |    |
| 4                     |          | 35,36             | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
|                       |          | 15                | 12     | 12       | 19        | 30     | 15     | 17     | 11        | 22 |
|                       |          | 38                | 12     |          | 17        | 19     | 23     | 23     |           | 13 |
| WHRQRC                |          | PowerPlex® Y 23   |        |          |           |        |        |        |           |    |
| 4                     |          |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
|                       |          | 15                | 12     | 12       | 19        |        | 15     | 17     |           | 22 |
|                       |          |                   | 12     | 12       | 17        | 19     |        | 23     | 10        | 13 |
| WWE77P                |          | PowerPlex® Y 23   |        |          |           |        |        |        |           |    |
| 4                     |          |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
|                       |          | 15                | 12     | 12       | 19        |        | 15     | 17     |           | 22 |
|                       |          |                   | 12     | 12       | 17        | 19     |        | 23     | 10        | 13 |

TABLE 2

| <b>WebCode</b>                |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |  |
|-------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|--|
| <b>Item</b>                   | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |  |
|                               | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |  |
|                               | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |  |
| <b>Item 4e - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |  |
| 2JRNH2                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| 2TUB6R                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                               | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 3BW84H                        | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |  |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |  |
|                               |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            | 13               |  |
| 3EY27T                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                               | 4e              |                          |               |                 |                  |               |               |               |                  |  |
| 4GD3HQ                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                               | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 4NEG6D                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                               | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 4X46XU                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| 4YWYXK                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            |               | 14            | 12               |  |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            | 11            | 22               |  |
|                               |                 |                          |               | 17              | 19               | 23            | 23            |               | 13               |  |
| 66H4ER                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                               | 4e              |                          |               |                 |                  |               |               |               |                  |  |
| 69HFAR                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
|                               | 4e              |                          |               |                 |                  |               |               |               |                  |  |
| 6JJRHE                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                               | 4e              |                          |               |                 |                  |               |               |               |                  |  |
| 6K9DTG                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
|                               | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |

TABLE 2

| WebCode | 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 | Y GATA H4 |

## Item 4e - YSTR Results

7A93XE PowerPlex® Y 23

4e



7HHCMT Yfiler™

4e

|    |       |    |    |    |    |    |    |
|----|-------|----|----|----|----|----|----|
| 14 | 11,14 | 13 | 29 | 24 | 11 | 14 | 12 |
| 15 | 12    | 12 | 19 | 15 | 17 |    |    |
|    |       |    |    | 23 |    | 13 |    |

7KLAUF Yfiler™

4e

|    |       |    |    |    |    |    |    |
|----|-------|----|----|----|----|----|----|
| 14 | 11,14 | 13 | 29 | 24 | 11 | 14 | 12 |
| 15 | 12    | 12 | 19 | 15 | 17 |    |    |
|    |       |    |    | 23 |    | 13 |    |

7KM3RM Yfiler™ Plus

4e

|       |    |       |    |    |    |    |    |    |
|-------|----|-------|----|----|----|----|----|----|
| 35,36 | 14 | 11,14 | 13 | 29 | 24 | 11 | 14 | 12 |
| 15    | 12 | 12    | 19 | 30 | 15 | 17 | 11 | 22 |
| 38    | 12 |       | 17 | 19 | 23 | 23 |    | 13 |

7RQ4RG Yfiler™ Plus

4e



8DQFJN Yfiler™

4e



97JFFC PowerPlex® Y 23

4e



9DG8LK Yfiler™ Plus

4e

|       |    |       |    |    |    |    |    |    |
|-------|----|-------|----|----|----|----|----|----|
| 35,36 | 14 | 11,14 | 13 | 29 | 24 | 11 | 14 | 12 |
| 15    | 12 | 12    | 19 | 30 | 15 | 17 | 11 | 22 |
| 38    | 12 |       | 17 | 19 | 23 | 23 |    | 13 |

9LAHWF Yfiler™ Plus

4e



9NXWKP Yfiler™

4e

|    |       |    |    |    |    |    |    |
|----|-------|----|----|----|----|----|----|
| 14 | 11,14 | 13 | 29 | 24 | 11 | 14 | 12 |
| 15 | 12    | 12 | 19 | 15 | 17 |    |    |
|    |       |    |    | 23 |    | 13 |    |

9PWWNV Yfiler™

4e

|    |       |    |    |    |    |    |    |
|----|-------|----|----|----|----|----|----|
| 14 | 11,14 | 13 | 29 | 24 | 11 | 14 | 12 |
| 15 | 12    | 12 | 19 | 15 | 17 |    |    |
|    |       |    |    | 23 |    | 13 |    |

9QAJ6P Yfiler™

4e



TABLE 2

| <b>WebCode</b>                |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |  |
|-------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|--|
| <b>Item</b>                   | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |  |
|                               | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |  |
|                               | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |  |
| <b>Item 4e - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |  |
| 9ZEG6L                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| A6LKEK                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 |                          |               |                 |                  |               |               |               |                  |  |
| A9Z4B9                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 |                          |               |                 |                  |               |               |               |                  |  |
| ADY9CT                        | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            |               | 22               |  |
|                               | 12              | 12                       | 17            | 19              | 23               | 23            | 10            |               | 13               |  |
| APBNBL                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| ATNQTB                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            |               | 23               |  |
|                               |                 |                          |               |                 |                  |               |               |               |                  |  |
| AZB8WL                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 |                          |               |                 |                  |               |               |               |                  |  |
| B6LNKG                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| BB6A8T                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            |               | 23               |  |
|                               |                 |                          |               |                 |                  |               |               |               |                  |  |
| BVBMYF                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| BWBHTK                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 |                          |               |                 |                  |               |               |               |                  |  |
| BYBTHR                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            |               | 23               |  |
|                               |                 |                          |               |                 |                  |               |               |               |                  |  |

TABLE 2

| <b>WebCode      Amplification Kit</b> |                 | DYF387S1 | DYS19  | DYS385 | DYS389-I | DYS389-II | DYS390 | DYS391 | DYS392 | DYS393    |
|---------------------------------------|-----------------|----------|--------|--------|----------|-----------|--------|--------|--------|-----------|
| Item                                  |                 | DYS437   | DYS438 | DYS439 | DYS448   | DYS449    | DYS456 | DYS458 | DYS460 | DYS481    |
|                                       |                 | DYS518   | DYS533 | DYS549 | DYS570   | DYS576    | DYS627 | DYS635 | DYS643 | Y GATA H4 |
| <b>Item 4e - YSTR Results</b>         |                 |          |        |        |          |           |        |        |        |           |
| C3NZD6                                | Yfiler™         |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 | 14       | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |           |
|                                       |                 | 15       | 12     | 12     | 19       | 15        | 17     |        |        |           |
|                                       |                 |          |        |        |          |           | 23     |        | 13     |           |
| C4JHE7                                | Yfiler™ Plus    |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 |          |        |        |          |           |        |        |        |           |
| CYRCXJ                                | PowerPlex® Y 23 |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 | 14       | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |           |
|                                       |                 | 15       | 12     | 12     | 19       | 15        | 17     |        | 22     |           |
|                                       |                 |          | 12     | 12     | 17       | 19        | 23     | 10     | 13     |           |
| DHVD89                                | Yfiler™         |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 | 14       | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |           |
|                                       |                 | 15       | 12     | 12     | 19       | 15        | 17     |        |        |           |
|                                       |                 |          |        |        |          |           | 23     |        | 13     |           |
| EHT7HK                                | Yfiler™         |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 | 14       | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |           |
|                                       |                 | 15       | 12     | 12     | 19       | 15        | 17     |        |        |           |
|                                       |                 |          |        |        |          |           | 23     |        | 13     |           |
| EPD3PG                                | PowerPlex® Y 23 |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 | 14       | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |           |
|                                       |                 | 15       | 12     | 12     | 19       | 15        | 17     |        | 22     |           |
|                                       |                 |          | 12     | 12     | 17       | 19        | 23     | 10     | 13     |           |
| EQQN4P                                | PowerPlex® Y 23 |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 | 14       | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |           |
|                                       |                 | 15       | 12     | 12     | 19       | 15        | 17     |        | 22     |           |
|                                       |                 |          | 12     | 12     | 17       | 19        | 23     | 10     | 13     |           |
| EU74PA                                | Yfiler™ Plus    |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 |          |        |        |          |           |        |        |        |           |
| EVH3JJ                                | Yfiler™         |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 | 14       | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |           |
|                                       |                 | 15       | 12     | 12     | 19       | 15        | 17     |        |        |           |
|                                       |                 |          |        |        |          |           | 23     |        | 13     |           |
| EWUHDK                                | Yfiler™ Plus    |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 |          |        |        |          |           |        |        |        |           |
| FB9639                                | PowerPlex® Y 23 |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 | 14       | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |           |
|                                       |                 | 15       | 12     | 12     | 19       | 15        | 17     |        | 22     |           |
|                                       |                 |          | 12     | 12     | 17       | 19        | 23     | 10     | 13     |           |
| FCJ62N                                | Yfiler™         |          |        |        |          |           |        |        |        |           |
| 4e                                    |                 | 14       | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |           |
|                                       |                 | 15       | 12     | 12     | 19       | 15        | 17     |        |        |           |
|                                       |                 |          |        |        |          |           | 23     |        | 13     |           |

TABLE 2

| <b>WebCode</b>                |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|-------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                   | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                               | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                               | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 4e - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| FFHGWN                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |    |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |    |
| FQLUXN                        | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4e                            | NR              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |    |
|                               |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            | 13               |    |
| G7B4CD                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 35,36                    | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                               |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| G8BY6H                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 4e                       |               |                 |                  |               |               |               |                  |    |
| GJZ8F4                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |    |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |    |
| GQXUBA                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 35,36                    | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                               |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| GUGRYZ                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 4e                       |               |                 |                  |               |               |               |                  |    |
| GXLBAE                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 4e                       |               |                 |                  |               |               |               |                  |    |
| HBKL7Z                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |    |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |    |
| HFFBQD                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 35,36                    | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                               |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| K8C9JH                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |    |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |    |
| K9KKWD                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                               |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |    |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |    |

TABLE 2

| <b>WebCode</b>                |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |  |
|-------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|--|
| <b>Item</b>                   | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |  |
|                               | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |  |
|                               | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |  |
| <b>Item 4e - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |  |
| KECM6K      Yfiler™           |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| KUM9NA      Yfiler™ Plus      |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| KWTQQC      Yfiler™           |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| LNY6XJ      Yfiler™           |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| LQ6LBG      Yfiler™           |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 |                          |               |                 |                  |               |               |               |                  |  |
| LTPF8G      Yfiler™           |                 |                          |               |                 |                  |               |               |               |                  |  |
|                               | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |  |
| 4e                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| MHRUM4      Yfiler™ Plus      |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| MW4GQ7      Yfiler™ Plus      |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| PEYP2A      PowerPlex® Y 23   |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                               |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            | 13               |  |
| QWR3T8      Yfiler™ Plus      |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| QWX28Q      Yfiler™           |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |  |
| QZELU7      Yfiler™           |                 |                          |               |                 |                  |               |               |               |                  |  |
| 4e                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                               | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                               |                 |                          |               |                 |                  | 23            |               |               | 13               |  |

TABLE 2

| <b>WebCode</b>                |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|-------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                   | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                               | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                               | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 4e - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| R8UK4B                        | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
| 4e                            | NR              | NR                       | NR            | NR              | NR               | NR            | NR            | NR            | NR               | NR |
| 4e                            | NR              | NR                       | NR            | NR              | NR               | NR            | NR            | NR            | NR               | NR |
| REB3J4                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                               | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |    |
| RNBZYQ                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
| 4e                            |                 |                          |               |                 |                  |               |               |               |                  |    |
| RNCTWY                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                               | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |    |
| RPBNQ3                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
| 4e                            |                 |                          |               |                 |                  |               |               |               |                  |    |
| RX4YXC                        | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
|                               | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |    |
| 4e                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                               | 12              | 12                       | 17            | 19              | 23               | 10            | 13            |               |                  |    |
| TFG3XA                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
| 4e                            |                 |                          |               |                 |                  |               |               |               |                  |    |
| TLNE9N                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                               | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |    |
| 4e                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                               |                 |                          |               |                 | 23               |               |               |               |                  |    |
| TXJHHA                        | PowerPlex® Y    |                          |               |                 |                  |               |               |               |                  |    |
|                               | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |    |
| 4e                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                               | 12              | 12                       | 17            | 19              | 23               | 10            | 13            |               |                  |    |
| U6D6PZ                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
| 4e                            |                 |                          |               |                 |                  |               |               |               |                  |    |
| UXDWYY                        | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                               | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4e                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                               | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |    |
| VTZA49                        | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                               | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |    |
| 4e                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                               |                 |                          |               |                 | 23               |               |               |               |                  |    |

TABLE 2

| WebCode                |                 | 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 | DYS481 | Y GATA H4 |
| Item 4e - YSTR Results |                 |                   |        |          |           |        |        |        |        |           |
| WR3HAZ                 | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4e                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
| X3DFN3                 | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4e                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
| XCNGA3                 | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4e                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
| XGXR4H                 | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4e                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
| XNHTKV                 | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4e                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     | 11     | 22        |
|                        | 38              | 12                |        | 17       | 19        | 23     | 23     |        |        | 13        |
| XRWJUW                 | Yfiler™         |                   |        |          |           |        |        |        |        |           |
| 4e                     |                 |                   |        |          |           |        |        |        |        |           |
| YRVV3K                 | Yfiler™ Plus    |                   |        |          |           |        |        |        |        |           |
| 4e                     |                 |                   |        |          |           |        |        |        |        |           |
| YRXMZB                 | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4e                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     | 11     | 22        |
|                        | 38              | 12                |        | 17       | 19        | 23     | 23     |        |        | 13        |
| ZAU94                  | PowerPlex® Y 23 |                   |        |          |           |        |        |        |        |           |
| 4e                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 22        |
|                        |                 | 12                | 12     | 17       | 19        |        | 23     | 10     |        | 13        |
| ZKAHKW                 | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4e                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     | 11     | 22        |
|                        | 38              | 12                |        | 17       | 19        | 23     | 23     |        |        | 13        |
| ZWHZEL                 | PowerPlex® Y 23 |                   |        |          |           |        |        |        |        |           |
| 4e                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 22        |
|                        |                 | 12                | 12     | 17       | 19        |        | 23     | 10     |        | 13        |
| ZYA44L                 | Yfiler™         |                   |        |          |           |        |        |        |        |           |
| 4e                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 22        |
|                        |                 |                   |        |          |           |        | 23     |        |        | 13        |

TABLE 2

| Item                    | WebCode Amplification Kit |        |        |          |           |        |        |        |        |           |
|-------------------------|---------------------------|--------|--------|----------|-----------|--------|--------|--------|--------|-----------|
|                         | DYF387S1                  | DYS19  | DYS385 | DYS389-I | DYS389-II | DYS390 | DYS391 | DYS392 | DYS393 |           |
|                         | DYS437                    | DYS438 | DYS439 | DYS448   | DYS449    | DYS456 | DYS458 | DYS460 | DYS481 | Y GATA H4 |
|                         | DYS518                    | DYS533 | DYS549 | DYS570   | DYS576    | DYS627 | DYS635 | DYS643 | DYS481 |           |
| Item 4sp - YSTR Results |                           |        |        |          |           |        |        |        |        |           |
| 2JRNH2                  | Yfiler™                   |        |        |          |           |        |        |        |        |           |
|                         | 14                        | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |        |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 15        | 17     |        |        |        | 13        |
|                         |                           |        |        |          | 23        |        |        |        |        |           |
| 2TUB6R                  | Yfiler™ Plus              |        |        |          |           |        |        |        |        |           |
|                         | 35,36                     | 14     | 11,14  | 13       | 29        | 24     | 11     | 14     | 12     |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 30        | 15     | 17     | 11     | 22     |           |
|                         | 38                        | 12     |        | 17       | 19        | 23     | 23     |        |        | 13        |
| 3BW84H                  | PowerPlex® Y 23           |        |        |          |           |        |        |        |        |           |
|                         | 4sp                       |        |        |          |           |        |        |        |        |           |
| 3EY27T                  | Yfiler™                   |        |        |          |           |        |        |        |        |           |
|                         | 14                        | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |        |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 15        | 17     |        |        |        | 13        |
|                         |                           |        |        |          | 23        |        |        |        |        |           |
| 4GD3HQ                  | Yfiler™ Plus              |        |        |          |           |        |        |        |        |           |
|                         | 35,36                     | 14     | 11,14  | 13       | 29        | 24     | 11     | 14     | 12     |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 30        | 15     | 17     | 11     | 22     |           |
|                         | 38                        | 12     |        | 17       | 19        | 23     | 23     |        |        | 13        |
| 4NEG6D                  | Yfiler™ Plus              |        |        |          |           |        |        |        |        |           |
|                         | 35,36                     | 14     | 11,14  | 13       | 29        | 24     | 11     | 14     | 12     |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 30        | 15     | 17     | 11     | 22     |           |
|                         | 38                        | 12     |        | 17       | 19        | 23     | 23     |        |        | 13        |
| 4X46XU                  | Yfiler™                   |        |        |          |           |        |        |        |        |           |
|                         | 14                        | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |        |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 15        | 17     |        |        |        | 13        |
|                         |                           |        |        |          | 23        |        |        |        |        |           |
| 4YWYXK                  | Yfiler™ Plus              |        |        |          |           |        |        |        |        |           |
|                         | 35,36                     | 14     | 11,14  | 13       | 29        | 24     | 11     | 14     | 12     |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 30        | 15     | 17     | 11     | 22     |           |
|                         | 38                        | 12     |        | 17       | 19        | 23     | 23     |        |        | 13        |
| 66H4ER                  | Yfiler™                   |        |        |          |           |        |        |        |        |           |
|                         | 14                        | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |        |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 15        | 17     |        |        |        | 13        |
|                         |                           |        |        |          | 23        |        |        |        |        |           |
| 69HFAR                  | Yfiler™                   |        |        |          |           |        |        |        |        |           |
|                         | 14                        | 11,14  | 13     | 29       | 24        | 11     | 14     | 12     |        |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 15        | 17     |        |        |        | 13        |
|                         |                           |        |        |          | 23        |        |        |        |        |           |
| 6JJRHE                  | Yfiler™ Plus              |        |        |          |           |        |        |        |        |           |
|                         | 35,36                     | 14     | 11,14  | 13       | 29        | 24     | 11     | 14     | 12     |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 30        | 15     | 17     | 11     | 22     |           |
|                         | 38                        | 12     |        | 17       | 19        | 23     | 23     |        |        | 13        |
| 6K9DTG                  | Yfiler™ Plus              |        |        |          |           |        |        |        |        |           |
|                         | 35,36                     | 14     | 11,14  | 13       | 29        | 24     | 11     | 14     | 12     |           |
| 4sp                     | 15                        | 12     | 12     | 19       | 30        | 15     | 17     | 11     | 22     |           |
|                         | 38                        | 12     |        | 17       | 19        | 23     | 23     |        |        | 13        |

TABLE 2

| WebCode                 |                 | 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 | DYS481 | Y GATA H4 |
| Item 4sp - YSTR Results |                 |                   |        |          |           |        |        |        |        |           |
| 7A93XE                  | PowerPlex® Y 23 |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 22        |
|                         |                 | 12                | 12     | 17       | 19        |        | 23     | 10     |        | 13        |
| 7HHCMT                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 23        |
|                         |                 |                   |        |          |           |        |        |        |        | 13        |
| 7KLAUF                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 23        |
|                         |                 |                   |        |          |           |        |        |        |        | 13        |
| 7KM3RM                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     |        | 22        |
|                         |                 | 38                | 12     |          | 17        | 19     | 23     | 23     |        | 13        |
| 7RQ4RG                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     |        | 22        |
|                         |                 | 38                | 12     |          | 17        | 19     | 23     | 23     |        | 13        |
| 8DQFJN                  | Yfiler™         |                   |        | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 23        |
|                         |                 |                   |        |          |           |        |        |        |        | 13        |
| 97JFFC                  | PowerPlex® Y 23 |                   |        | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 22        |
|                         |                 |                   | 12     | 12       | 17        | 19     |        | 23     | 10     | 13        |
| 9DG8LK                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     |        | 22        |
|                         |                 | 38                | 12     |          | 17        | 19     | 23     | 23     |        | 13        |
| 9LAHWF                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     |        | 22        |
|                         |                 | 38                | 12     |          | 17        | 19     | 23     | 23     |        | 13        |
| 9NXWKP                  | Yfiler™         |                   |        | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 23        |
|                         |                 |                   |        |          |           |        |        |        |        | 13        |
| 9PWWNV                  | Yfiler™         |                   |        | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 23        |
|                         |                 |                   |        |          |           |        |        |        |        | 13        |
| 9QAJ6P                  | Yfiler™         |                   |        | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 23        |
|                         |                 |                   |        |          |           |        |        |        |        | 13        |

TABLE 2

| <b>WebCode</b>                 |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |  |
|--------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|--|
| <b>Item</b>                    | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |  |
|                                | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |  |
|                                | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |  |
| <b>Item 4sp - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |  |
| 9ZEG6L                         | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                                | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| A6LKEK                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                                |                 |                          |               | 17              | 19               | 23            |               |               | 13               |  |
| A9Z4B9                         | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                                | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| ADY9CT                         | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                                |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            | 13               |  |
| APBNBL                         | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                                | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| ATNQTB                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                                |                 |                          |               |                 | 19               |               | 23            |               | 13               |  |
| AZB8WL                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                                |                 |                          |               |                 | 19               |               | 23            |               | 13               |  |
| B6LNKG                         | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                                | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| BB6A8T                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                                |                 |                          |               |                 | 19               |               | 23            |               | 13               |  |
| BVBMYF                         | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |  |
|                                | 38              | 12                       |               | 17              | 19               | 23            | 23            |               | 13               |  |
| BWBHTK                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                                |                 |                          |               |                 | 19               |               | 23            |               | 13               |  |
| BYBTHR                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |  |
| 4sp                            |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |  |
|                                | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  |  |
|                                |                 |                          |               |                 | 19               |               | 23            |               | 13               |  |

TABLE 2

| <b>WebCode</b>                 |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|--------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                    | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                                | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                                | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 4sp - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| C3NZD6                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| C4JHE7                         | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 30            | 15            | 17            | 11               | 22 |
|                                |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| CYRCXJ                         | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |    |
|                                |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| DHVD89                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| EHT7HK                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| EPD3PG                         | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |    |
|                                |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| EQQN4P                         | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |    |
|                                |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| EU74PA                         | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 30            | 15            | 17            | 11               | 22 |
|                                |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| EVH3JJ                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| EWUHDK                         | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 30            | 15            | 17            | 11               | 22 |
|                                |                 | 38                       | 12            |                 | 17               | 19            | 23            | 23            |                  | 13 |
| FB9639                         | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               | 22               |    |
|                                |                 |                          | 12            | 12              | 17               | 19            |               | 23            | 10               | 13 |
| FCJ62N                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |

TABLE 2

| <b>WebCode</b>                 |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|--------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                    | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                                | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                                | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 4sp - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| FFHGWN                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| FQLUXN                         | PowerPlex® Y 23 |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 22 |
|                                |                 | 12                       | 12            | 17              | 19               |               | 23            | 10            |                  | 13 |
| G7B4CD                         | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 4sp                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            |                  | 22 |
|                                |                 | 38                       | 12            |                 | 17               | 19            | 23            |               |                  | 13 |
| G8BY6H                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| GJZ8F4                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| GQXUBA                         | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 4sp                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            |                  | 22 |
|                                |                 | 38                       | 12            |                 | 17               | 19            | 23            |               |                  | 13 |
| GUGRYZ                         | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 4sp                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            |                  | 22 |
|                                |                 | 38                       | 12            |                 | 17               | 19            | 23            |               |                  | 13 |
| GXLBAE                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| HBKL7Z                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| HFFBQD                         | Yfiler™ Plus    |                          | 35,36         | 14              | 11,14            | 13            | 29            | 24            | 11               | 14 |
| 4sp                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            |                  | 22 |
|                                |                 | 38                       | 12            |                 | 17               | 19            | 23            |               |                  | 13 |
| K8C9JH                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |
| K9KKWD                         | Yfiler™         |                          | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              |                  | 15            | 17            |               |                  | 23 |
|                                |                 |                          |               |                 |                  |               |               |               |                  | 13 |

TABLE 2

| WebCode                 |                 | 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 | DYS481 | Y GATA H4 |
| Item 4sp - YSTR Results |                 |                   |        |          |           |        |        |        |        |           |
| KECM6K                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
| KUM9NA                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     | 22     | 12        |
|                         | 38              | 12                |        | 17       | 19        | 23     | 23     |        |        | 13        |
| KWTQQC                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
| LNY6XJ                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
| LQ6LBG                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
| LTPF8G                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
| MHRUM4                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     | 22     | 12        |
|                         | 38              | 12                |        | 17       | 19        | 23     | 23     |        |        | 13        |
| MW4GQ7                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     | 22     | 12        |
|                         | 38              | 12                |        | 17       | 19        | 23     | 23     |        |        | 13        |
| PEYP2A                  | PowerPlex® Y 23 |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 22        |
|                         |                 | 12                | 12     | 17       | 19        |        | 23     | 10     |        | 13        |
| QWR3T8                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11     | 14        |
| 4sp                     | 15              | 12                | 12     | 19       | 30        | 15     | 17     | 11     | 22     | 12        |
|                         | 38              | 12                |        | 17       | 19        | 23     | 23     |        |        | 13        |
| QWX28Q                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
|                         |                 |                   |        |          |           | 23     |        |        |        |           |
| QZELU7                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14     | 12        |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |        | 13        |
|                         |                 |                   |        |          |           | 23     |        |        |        |           |

TABLE 2

| <b>WebCode</b>                 |                 | <b>Amplification Kit</b> |               |                 |                  |               |               |               |                  |    |
|--------------------------------|-----------------|--------------------------|---------------|-----------------|------------------|---------------|---------------|---------------|------------------|----|
| <b>Item</b>                    | <b>DYF387S1</b> | <b>DYS19</b>             | <b>DYS385</b> | <b>DYS389-I</b> | <b>DYS389-II</b> | <b>DYS390</b> | <b>DYS391</b> | <b>DYS392</b> | <b>DYS393</b>    |    |
|                                | <b>DYS437</b>   | <b>DYS438</b>            | <b>DYS439</b> | <b>DYS448</b>   | <b>DYS449</b>    | <b>DYS456</b> | <b>DYS458</b> | <b>DYS460</b> | <b>DYS481</b>    |    |
|                                | <b>DYS518</b>   | <b>DYS533</b>            | <b>DYS549</b> | <b>DYS570</b>   | <b>DYS576</b>    | <b>DYS627</b> | <b>DYS635</b> | <b>DYS643</b> | <b>Y GATA H4</b> |    |
| <b>Item 4sp - YSTR Results</b> |                 |                          |               |                 |                  |               |               |               |                  |    |
| R8UK4B                         | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
| 4sp                            | 14              | 11,14                    | 13            | 29              | 24               | 11            | 14            | 12            |                  |    |
|                                | 15              | 12                       | 12            | 19              | 15               | 17            |               |               | 22               |    |
|                                |                 | 12                       | 12            | 17              | 19               | 23            | 10            |               |                  | 13 |
| REB3J4                         | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                                | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                                |                 | 38                       | 12            | 17              | 19               | 23            | 23            |               |                  | 13 |
| RNBZYQ                         | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                                | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                                |                 | 38                       | 12            | 17              | 19               | 23            | 23            |               |                  | 13 |
| RNCTWY                         | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                                | 35,36           | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                                |                 | 38                       | 12            | 17              | 19               | 23            | 23            |               |                  | 13 |
| RPBNQ3                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                                |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                                |                 |                          |               |                 | 23               |               |               |               |                  | 13 |
| RX4YXC                         | PowerPlex® Y 23 |                          |               |                 |                  |               |               |               |                  |    |
|                                |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                                |                 |                          | 12            | 12              | 19               | 23            | 10            |               |                  | 13 |
| TFG3XA                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                                |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                                |                 |                          |               |                 | 23               |               |               |               |                  | 13 |
| TLNE9N                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                                |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                                |                 |                          |               |                 | 23               |               |               |               |                  | 13 |
| TXJHHA                         | PowerPlex® Y    |                          |               |                 |                  |               |               |               |                  |    |
|                                |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                                |                 |                          | 12            | 12              | 19               | 23            | 10            |               |                  | 13 |
| U6D6PZ                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                                |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                                |                 |                          |               |                 | 23               |               |               |               |                  | 13 |
| UXDWYY                         | Yfiler™ Plus    |                          |               |                 |                  |               |               |               |                  |    |
|                                |                 | 35,36                    | 14            | 11,14           | 13               | 29            | 24            | 11            | 14               | 12 |
| 4sp                            | 15              | 12                       | 12            | 19              | 30               | 15            | 17            | 11            | 22               |    |
|                                |                 | 38                       | 12            | 17              | 19               | 23            | 23            |               |                  | 13 |
| VTZA49                         | Yfiler™         |                          |               |                 |                  |               |               |               |                  |    |
|                                |                 | 14                       | 11,14         | 13              | 29               | 24            | 11            | 14            | 12               |    |
| 4sp                            | 15              | 12                       | 12            | 19              | 15               | 17            |               |               |                  |    |
|                                |                 |                          |               |                 | 23               |               |               |               |                  | 13 |

TABLE 2

| WebCode                 |                 | 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 | Y GATA H4 |    |
| Item 4sp - YSTR Results |                 |                   |        |          |           |        |        |        |           |    |
| WR3HAZ                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |           | 13 |
| X3DFN3                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |           | 13 |
| XCNGA3                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |           | 13 |
| XGXR4H                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |           | 13 |
| XNHTKV                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11        | 14 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 30     | 15     | 17     | 11        | 22 |
|                         | 38              | 12                |        |          | 17        | 19     | 23     | 23     |           | 13 |
| XRWJUW                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |           | 13 |
| YRVV3K                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11        | 14 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 30     | 15     | 17     | 11        | 22 |
|                         | 38              | 12                |        |          | 17        | 19     | 23     | 23     |           | 13 |
| YRXMZL                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11        | 14 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 30     | 15     | 17     | 11        | 22 |
|                         | 38              | 12                |        |          | 17        | 19     | 23     | 23     |           | 13 |
| ZAUM94                  | PowerPlex® Y 23 |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |           | 22 |
|                         |                 | 12                | 12     | 17       | 19        |        |        | 23     | 10        | 13 |
| ZKAHKW                  | Yfiler™ Plus    |                   | 35,36  | 14       | 11,14     | 13     | 29     | 24     | 11        | 14 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 30     | 15     | 17     | 11        | 22 |
|                         | 38              | 12                |        |          | 17        | 19     | 23     | 23     |           | 13 |
| ZWHZEL                  | PowerPlex® Y 23 |                   |        |          |           |        |        |        |           |    |
| 4sp                     |                 |                   |        |          |           |        |        |        |           |    |
| ZYA44L                  | Yfiler™         |                   | 14     | 11,14    | 13        | 29     | 24     | 11     | 14        | 12 |
| 4sp                     | 15              | 12                | 12     | 19       |           | 15     | 17     |        |           | 13 |
|                         |                 |                   |        |          |           |        | 23     |        |           |    |

# **Additional DNA Results**

TABLE 3

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 | Item 1 | Item 2 | Item 3 | Item 3e | Item 3sp | Item 4 | Item 4e | Item 4sp |
|-------|---------|--------|--------|--------|---------|----------|--------|---------|----------|
| QS1   | 7QHPR3  |        |        | Q      |         |          |        |         |          |
|       | 7QVJ83  |        | Q      | Q      |         |          |        |         |          |
|       | 842QMZ  |        | Q      | Q      |         |          |        |         |          |
|       | 9U79LW  |        | Q      | Q      |         |          |        |         |          |
|       | B63VQY  |        | Q      | Q      |         |          |        |         |          |
|       | B6ZBXP  |        | Q      | Q      |         |          |        |         |          |
|       | BJYCFW  |        | Q      | Q      |         |          |        |         |          |
|       | FMJTWQ  |        | Q      | Q      |         |          |        |         |          |
|       | GZQ2CN  |        | Q      | Q      |         |          |        |         |          |
|       | HQFYQM  |        | Q      | Q      |         |          |        |         |          |
|       | JXBH7N  |        | Q      | Q      |         |          |        |         |          |
|       | LQ6NZK  |        | Q      | Q      |         |          |        |         |          |
|       | PE2ATJ  |        | Q      | Q      |         |          |        |         |          |
|       | Q67QRF  |        | Q      | Q      |         |          |        |         |          |
|       | QZFGGH  |        | Q      | Q      |         |          |        |         |          |
|       | RHBA3F  |        | Q      | Q      |         |          |        |         |          |
|       | TAFQ2C  |        | Q      | Q      |         |          |        |         |          |
|       | XHCCU8  |        | Q      | Q      |         |          |        |         |          |
| QS2   | 7QHPR3  |        |        | S      |         |          |        |         |          |
|       | 7QVJ83  |        | S      | S      |         |          |        |         |          |
|       | 842QMZ  |        | S      | S      |         |          |        |         |          |
|       | 9U79LW  |        | S      | S      |         |          |        |         |          |
|       | B63VQY  |        | S      | S      |         |          |        |         |          |
|       | B6ZBXP  |        | S      | S      |         |          |        |         |          |
|       | BJYCFW  |        | S      | S      |         |          |        |         |          |
|       | FMJTWQ  |        | S      | S      |         |          |        |         |          |
|       | GZQ2CN  |        | S      | S      |         |          |        |         |          |
|       | HQFYQM  |        | S      | S      |         |          |        |         |          |
|       | JXBH7N  |        | S      | S      |         |          |        |         |          |
|       | LQ6NZK  |        | S      | S      |         |          |        |         |          |
|       | PE2ATJ  |        | S      | S      |         |          |        |         |          |
|       | Q67QRF  |        | S      | S      |         |          |        |         |          |
|       | QZFGGH  |        | S      | S      |         |          |        |         |          |

TABLE 3

| <b>Locus</b> | <b>WebCode</b> | <b>Item 1</b> | <b>Item 2</b> | <b>Item 3</b> | <b>Item 3e</b> | <b>Item 3sp</b> | <b>Item 4</b> | <b>Item 4e</b> | <b>Item 4sp</b> |
|--------------|----------------|---------------|---------------|---------------|----------------|-----------------|---------------|----------------|-----------------|
| QS2 cont'd   | RHBA3F         | S             | S             |               |                |                 |               |                |                 |
|              | TAFQ2C         | S             | S             |               |                |                 |               |                |                 |
|              | XHCCU8         | S             | S             |               |                |                 |               |                |                 |

# 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 4

| WebCode | Victim (Item 1)   |        | Suspect (Item 2) |        | WebCode | Victim (Item 1)   |        | Suspect (Item 2) |        |
|---------|---|--------|------------------|--------|---------|---|--------|------------------|--------|
|         | Item 3  | Item 4 | Item 3           | Item 4 |         | Item 3  | Item 4 | Item 3           | Item 4 |
| 2JRNH2  | No  | Yes    | No               | Yes    | 6JJRHE  | No  | Yes    | No               | Yes    |
| 2TUB6R  | No  | Yes    | No               | Yes    | 6K9DTG  | No  | Yes    | No               | Yes    |
| 2VNYNN  | No  | Yes    | No               | Yes    | 6YP97R  | No  | Yes    | No               | Yes    |
| 38ZG4X  | No  | Yes    | No               | Yes    | 7A93XE  | No  | Yes    | No               | Yes    |
| 3BW84H  | No  | Yes    | No               | Yes    | 7HHCMT  | No  | Yes    | No               | Yes    |
| 3C4MEU  | No Interpretations Reported, DNA Analyzed for Database purposes only. |        |                  |        | 7HYN3D  | No  | Yes    | No               | Yes    |
| 3DZ6CP  | No  | Yes    | No               | Yes    | 7KLAUF  | No  | Yes    | No               | Yes    |
| 3EY27T  |   |        |                  |        | 7KM3RM  | No  | Yes    | No               | Yes    |
| 3NYTCY  | No  | Yes    | No               | Yes    | 7NUB3T  | No  | Yes    | No               | Yes    |
| 3PGKN4  | No  | Yes    | No               | Yes    | 7QE6YT  | No  | Yes    | No               | Yes    |
| 44TKTT  | No Interpretations Reported, DNA Analyzed for Database purposes only. |        |                  |        | 7QHPR3  | No Interpretations Reported, DNA Analyzed for Database purposes only. |        |                  |        |
| 4EQNTG  | No  | Yes    | No               | Yes    | 7QVJ83  | No Interpretations Reported, DNA Analyzed for Database purposes only. |        |                  |        |
| 4GD3HQ  | No  | Yes    | No               | Yes    | 7RQ4RG  | No  | Yes    | No               | Yes    |
| 4NEG6D  | No  | Yes    | No               | Yes    | 7RRYFT  | No  | Yes    | No               | Yes    |
| 4X46XU  | No  | Yes    | No               | Yes    | 7VRGN3  | No  | Yes    | No               | Yes    |
| 4YWYXK  | No  | Yes    | No               | Yes    | 842QMZ  | No Interpretations Reported, DNA Analyzed for Database purposes only. |        |                  |        |
| 66H4ER  | No  | Yes    | No               | Yes    | 8CTDAP  | No  | Yes    | No               | Yes    |
| 66J9KM  | No  | Yes    | No               | Yes    | 8DQFJN  | No  | Yes    | No               | Yes    |
| 69HFAR  | No  | Yes    | No               | Yes    | 8HF27G  | No  | Yes    | No               | Yes    |
| 69HJGM  | No  | Yes    | No               | Yes    | 8KJYFN  | No  | Yes    | No               | Yes    |

TABLE 4

| <u><b>WebCode</b></u> | <u><b>Victim (Item 1)</b></u>   |                      | <u><b>Suspect (Item 2)</b></u> |                      | <u><b>WebCode</b></u> | <u><b>Victim (Item 1)</b></u>   |                      | <u><b>Suspect (Item 2)</b></u> |                      |
|-----------------------|---|----------------------|--------------------------------|----------------------|-----------------------|---|----------------------|--------------------------------|----------------------|
|                       | <u><b>Item 3</b></u>  | <u><b>Item 4</b></u> | <u><b>Item 3</b></u>           | <u><b>Item 4</b></u> |                       | <u><b>Item 3</b></u>  | <u><b>Item 4</b></u> | <u><b>Item 3</b></u>           | <u><b>Item 4</b></u> |
| 96QUX2                | No  | Yes                  | No                             | Yes                  | AZB8WL                | No  | Interp               | No                             | Interp               |
| 97JFFC                | No  | Yes                  | No                             | Yes                  | B63VQY                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| 9DG8LK                | No  | Yes                  | No                             | Yes                  | B6LNKG                | No  | Yes                  | No                             | Yes                  |
| 9K227W                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      | B6Y9DQ                | No  | Yes                  | No                             | Yes                  |
| 9LAHWF                | No  | Yes                  | No                             | Yes                  | B6ZBXP                | No  | Yes                  | No                             | Yes                  |
| 9NXWKP                | No  | Yes                  | No                             | Yes                  | BB6A8T                | No  | Yes                  | No                             | Yes                  |
| 9PWWNV                | No  | Yes                  | No                             | Yes                  | BJYCFW                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| 9QAJ6P                | No  | Yes                  | No                             | Yes                  | BVBMYF                | No  | Yes                  | No                             | Yes                  |
| 9U79LW                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      | BWBHTK                | No  | Yes                  | No                             | Yes                  |
| 9V3NTM                | No  | Yes                  | No                             | Yes                  | BYBTHR                | No  | Yes                  | No                             | Yes                  |
| 9ZEG6L                | No  | Yes                  | No                             | Yes                  | BYUJM7                | No  | Yes                  | No                             | Yes                  |
| A3GYH8                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      | C3NZD6                | No  | Yes                  | No                             | Yes                  |
| A6LKEK                | No  | Yes                  | No                             | Yes                  | C4JHE7                | No  | Yes                  | No                             | Yes                  |
| A86L98                | No  | Yes                  | No                             | Yes                  | CYRCXJ                | No  | Yes                  | No                             | Yes                  |
| A9Z4B9                | No  | Yes                  | No                             | Yes                  | D8JYDL                | No  | Yes                  | No                             | Yes                  |
| ADY9CT                | No  | Yes                  | No                             | Yes                  | DHVD89                | No  | Yes                  | No                             | Yes                  |
| AF3DJL                | No  | Yes                  | No                             | Yes                  | DK4N4C                | No  | Yes                  | No                             | Yes                  |
| AGXWKM                | No  | Yes                  | No                             | Yes                  | EHT7HK                | No  | Yes                  | No                             | Yes                  |
| AJ2MUN                | No  | Yes                  | No                             | Yes                  | EM9GT4                | No  | Yes                  | No                             | Yes                  |
| APBNBL                | No  | Yes                  | No                             | Yes                  | EPD3PG                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| ATNQTB                | No  | Yes                  | No                             | Yes                  | EQQN4P                | No  | Yes                  | No                             | Yes                  |

TABLE 4

| <u><b>WebCode</b></u> | <u><b>Victim (Item 1)</b></u>   |                      | <u><b>Suspect (Item 2)</b></u> |                      | <u><b>WebCode</b></u> | <u><b>Victim (Item 1)</b></u>   |                      | <u><b>Suspect (Item 2)</b></u> |                      |
|-----------------------|---|----------------------|--------------------------------|----------------------|-----------------------|---|----------------------|--------------------------------|----------------------|
|                       | <u><b>Item 3</b></u>  | <u><b>Item 4</b></u> | <u><b>Item 3</b></u>           | <u><b>Item 4</b></u> |                       | <u><b>Item 3</b></u>  | <u><b>Item 4</b></u> | <u><b>Item 3</b></u>           | <u><b>Item 4</b></u> |
| EU74PA                | No  | Yes                  | No                             | Yes                  | H4LAWN                | No  | Yes                  | No                             | Yes                  |
| EVH3JJ                | No  | Yes                  | No                             | Yes                  | HBKL7Z                | No  | Yes                  | No                             | Yes                  |
| EWDLLK                | No  | Yes                  | No                             | Yes                  | HFFBQD                | No  | Yes                  | No                             | Yes                  |
| EWUHDK                | No  | Yes                  | No                             | Yes                  | HQFYQM                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| F3X4G8                | No  | Yes                  | No                             | Yes                  | HXCZM8                | No  | Yes                  | No                             | Yes                  |
| FB9639                | No  | Yes                  | No                             | Yes                  | JXANJB                | No  | Yes                  | No                             | Yes                  |
| FCJ62N                | No  | Yes                  | No                             | Yes                  | JXBH7N                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| FFHGWN                | No  | Yes                  | No                             | Yes                  | K8C9JH                | No  | Yes                  | No                             | Yes                  |
| FMJTWQ                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      | K9KKWD                | No  | Yes                  | No                             | Yes                  |
| FQLUXN                | No  | Yes                  | No                             | Yes                  | KECM6K                | No  | Yes                  | No                             | Yes                  |
| G7B4CD                | No  | Yes                  | No                             | Yes                  | KUM9NA                | No  | Yes                  | No                             | Yes                  |
| G8BY6H                | No  | Yes                  | No                             | Yes                  | KWTQQC                | No  | Yes                  | No                             | Yes                  |
| GHP2H3                | No  | Yes                  | No                             | Yes                  | KWGYF                 | No  | Yes                  | No                             | Yes                  |
| GJZ8F4                | No  | Yes                  | No                             | Yes                  | KY249D                | No  | Yes                  | No                             | Yes                  |
| GQXUBA                | No  | Yes                  | No                             | Yes                  | L66AJA                | No  | Yes                  | No                             | Yes                  |
| GRRJT6                | No  | Yes                  | No                             | Yes                  | LB8JP3                | No  | Yes                  | No                             | Yes                  |
| GUGRYZ                | No  | Yes                  | No                             | Yes                  | LH89HM                | No  | Yes                  | No                             | Yes                  |
| GWRMRJ                | No  | Yes                  | No                             | Yes                  | LNY6XJ                | No  | Yes                  | No                             | Yes                  |
| GXLBAE                |   |                      |                                |                      | LQ6LBG                |   |                      |                                |                      |
| GZQ2CN                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      | LQ6NZK                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| H42DQF                | No  | Yes                  | No                             | Yes                  | LTPF8G                | No  | Yes                  | No                             | Yes                  |

TABLE 4

| <u><b>WebCode</b></u> | <u><b>Victim (Item 1)</b></u>   |                      | <u><b>Suspect (Item 2)</b></u> |                      | <u><b>WebCode</b></u> | <u><b>Victim (Item 1)</b></u>   |                      | <u><b>Suspect (Item 2)</b></u> |                      |
|-----------------------|---|----------------------|--------------------------------|----------------------|-----------------------|---|----------------------|--------------------------------|----------------------|
|                       | <u><b>Item 3</b></u>  | <u><b>Item 4</b></u> | <u><b>Item 3</b></u>           | <u><b>Item 4</b></u> |                       | <u><b>Item 3</b></u>  | <u><b>Item 4</b></u> | <u><b>Item 3</b></u>           | <u><b>Item 4</b></u> |
| LYYFPE                | No  | Yes                  | No                             | Yes                  | QZELU7                | No  | Yes                  | No                             | Yes                  |
| M4NDTV                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      | QZFGGH                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| M7VXEB                | No  | Yes                  | No                             | Yes                  | R4PY8X                | No  | Yes                  | No                             | Yes                  |
| MBQFZG                | No  | Yes                  | No                             | Yes                  | R8UK4B                | No  | Yes                  | No                             | Yes                  |
| MGCKNB                | No  | Yes                  | No                             | Yes                  | REB3J4                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| MHRUM4                | No  | Yes                  | No                             | Yes                  | RHBA3F                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| MUF32W                | No  | Yes                  | Yes                            | Yes                  | RNBZYQ                | No  | Yes                  | No                             | Yes                  |
| MW4GQ7                | No  | Yes                  | No                             | Yes                  | RNCTWY                | No  | Yes                  | No                             | Yes                  |
| NJD32X                | No  | Yes                  | No                             | Yes                  | RNYYGX                | No  | Yes                  | No                             | Yes                  |
| PCEV4A                | No  | Yes                  | No                             | Yes                  | RPBNQ3                | No  | Yes                  | No                             | Yes                  |
| PE2ATJ                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      | RX4YXC                | No  | Yes                  | No                             | Yes                  |
| PEYP2A                | No  | Yes                  | No                             | Yes                  | T8BX8E                | No  | Yes                  | No                             | Yes                  |
| PK4GA8                | No  | Yes                  | No                             | Yes                  | TAFQ2C                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      |
| Q4UYT8                | No  | Yes                  | No                             | Yes                  | TFG3XA                | No Interp   | No Interp            | No Interp                      | No Interp            |
| Q67QRF                | No Interpretations Reported, DNA Analyzed for Database purposes only. |                      |                                |                      | TGVC34                | No  | Yes                  | No                             | Yes                  |
| QA2KPG                | No  | No                   | Yes                            | Yes                  | TLNE9N                | No  | Yes                  | No                             | Yes                  |
| QA2Z6H                | No  | Yes                  | No                             | Yes                  | TXJHHA                | No  | Yes                  | No                             | Yes                  |
| QBZXZ9                | No  | Yes                  | No                             | Yes                  | TXY238                | No  | Yes                  | No                             | Yes                  |
| QVJWAR                | No  | Yes                  | No                             | Yes                  | U3C4P3                | No  | Yes                  | No                             | Yes                  |
| QWR3T8                | No  | Yes                  | No                             | Yes                  | U6D6PZ                | No  | Yes                  | No                             | Yes                  |
| QWX28Q                | No  | Yes                  | No                             | Yes                  | UXDWYY                | No  | Yes                  | No                             | Yes                  |

TABLE 4

| <b>WebCode</b> | <b>Victim (Item 1)</b>  |               | <b>Suspect (Item 2)</b> |               | <b>WebCode</b> | <b>Victim (Item 1)</b> |               | <b>Suspect (Item 2)</b> |               |
|----------------|---|---------------|-------------------------|---------------|----------------|------------------------|---------------|-------------------------|---------------|
|                | <b>Item 3</b>   | <b>Item 4</b> | <b>Item 3</b>           | <b>Item 4</b> |                | <b>Item 3</b>          | <b>Item 4</b> | <b>Item 3</b>           | <b>Item 4</b> |
| UYCTT3         | No  | Yes           | No                      | Yes           | YRVV3K         | No                     | Yes           | No                      | Yes           |
| VHXLXC         | No  | Yes           | No                      | Yes           | YRXMZR         | No                     | Yes           | No                      | Yes           |
| VLJTE7         | No  | Yes           | No                      | Yes           | ZARTPX         | No                     | Yes           | No                      | Yes           |
| VTZA49         | No  | Yes           | No                      | Yes           | ZAUM94         | No                     | Yes           | No                      | Yes           |
| W7K9A2         | No  | Yes           | No                      | Yes           | ZEH8BY         | No                     | Yes           | No                      | Yes           |
| WHRQRC         | No  | Yes           | No                      | Yes           | ZKAHKW         | No                     | Yes           | No                      | Yes           |
| WR3HAZ         | No  | Yes           | No                      | Yes           | ZWHZEL         | No                     | Yes           | No                      | Yes           |
| WWE77P         | No  | Yes           | No                      | Yes           | ZYA44L         | No                     | Yes           | No                      | Yes           |
| X3DFN3         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| X8AW99         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| XC8DL3         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| XCNGA3         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| XDYG9H         | No Interpretations Reported, DNA Analyzed for Database purposes only. |               |                         |               |                |                        |               |                         |               |
| XG38J4         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| XGXR4H         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| XHCCU8         | No Interpretations Reported, DNA Analyzed for Database purposes only. |               |                         |               |                |                        |               |                         |               |
| XNHTKV         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| XPRVAZ         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| XRWJUW         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| XU7FEZ         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |
| YCZL8R         | No  | Yes           | No                      | Yes           |                |                        |               |                         |               |

**DNA Interpretation****Response Summary****Participants reporting DNA results: 195**

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               | <b>0</b>        | <b>164</b>    | <b>2</b>         | <b>165</b>    |
| No                | <b>165</b>      | <b>1</b>      | <b>163</b>       | <b>0</b>      |
| Inc               | <b>0</b>        | <b>0</b>      | <b>0</b>         | <b>0</b>      |
| No Interpretation | <b>2</b>        | <b>2</b>      | <b>2</b>         | <b>2</b>      |
| No Response       | <b>3</b>        | <b>3</b>      | <b>3</b>         | <b>3</b>      |

Participants analyzing DNA for database purposes only: 25

## **Additional Comments**

TABLE 5

| WebCode | Additional Comments  |
|---------|--|
| 2VNYNN  | N.D.: Not Detected. Results are entered only for GlobalFiler loci as casework reporting is on GlobalFiler loci. PowerPlex Fusion 6C is used only for allele verification. Item 3 at locus DYS448 – There is a minor allele 19, which is inconsistent with being a contributor to the overall profile. The peak height ratio of allele 19 to allele 20 is 5.51%, exceeding the Laboratory's stutter threshold for this locus of 5.06%. The minor allele 19 is likely to be an elevated stutter. Item 4 sp at locus D12S391 – There is a minor allele 20, which is inconsistent with being a contributor to the overall profile. The average peak height ratio of allele 20 to allele 21 is 19.12%, exceeding the Laboratory's stutter threshold for this locus of 13.98%. The minor allele 20 is likely to be an elevated stutter.  |
| 3EY27T  | No comparisons performed [Initials] 4/19/22  |
| 3PGKN4  | Items 3 and 4 were extracted via differential separation, per laboratory protocol. Insufficient human DNA was detected in the sperm fraction of Q1.3.1, so the report will reflect the non-sperm fraction (epi-fraction) only for Q1.3.1.  |
| 4GD3HQ  | NR=No Results. STRmix analysis was conducted on this test. Data reported out in this test is from analysis using Genemapper ID-X.  |
| 4X46XU  | Extraction: Item 1 and Item 2 were extracted using in-situ method. Item 3 was extracted using Promega DNA-IQ Purification Kit on TECAN Freedom Evo 150. Item 4 was extracted using differential extraction method. Quantification: Item 3 and Item 4 were quantified using ABI Quantifiler Trio DNA Quantification Kit on ABI QuantStudio 5 Real-Time PCR System. Amplification: Item 1 and Item 2 were amplified using GlobalFiler Express PCR Amplification Kit on Proflex PCR System. Item 3 and Item 4 were amplified using GlobalFiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Item 2, Item 3 and Item 4 were amplified using AmpFLSTR Yfiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Electrophoresis: Electrophoresis were carried out on ABI 3500xL Genetic Analyzer for Item 1, Item 2, Item 3 and Item 4. Quality Control: Reagent Blank, Positive Control and Negative Control were carried out through analysis and all gave intended results. *NM - non-male allele.   |
| 66H4ER  | NR = No results  |
| 69HFAR  | NR = no result [Initials] 04/12/2022   |
| 7HHCMT  | Extraction: Item 1 and Item 2 were extracted on FTA card (in-situ extraction method). Item 3 was extracted using PrepFiler Express DNA Extraction Kit. Item 4 was extracted using Chelex extraction method (differential extraction method). Quantification: Item 3 and Item 4 were quantified using ABI Quantifiler Trio DNA Quantification Kit on ABI QuantStudio 5 Real-Time PCR System. Amplification: Item 1 and Item 2 were amplified using GlobalFiler Express PCR Amplification Kit on Proflex PCR System. Item 3 and Item 4 were amplified using GlobalFiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Item 2, Item 3 and Item 4 were amplified using AmpFLSTR Yfiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Electrophoresis: Electrophoresis were carried out on ABI 3500xL Genetic Analyzer for Item 1 and Item 2 (GlobalFiler Express Kit), Item 3 and Item 4 (GlobalFiler Kit). Electrophoresis were carried out on ABI 3500xl Genetic Analyzer for Item 2, Item 3 and Item 4 (Y-Filer Kit). Quality Control: Reagent Blank, Positive Control and Negative Control were carried out through analysis and all gave intended results. NM: Non-male |
| 7HYN3D  | Items 3 and 4 were extracted via differential separation, per laboratory protocol. No human DNA was detected in the sperm fraction of item 3, so the report will reflect the non-sperm fraction (epi-fraction) only for item 3.  |
| 7NUB3T  | ND = not detected  |
| 8DQFJN  | NR= No result. [Initials] 03/30/2022   |

TABLE 5

| WebCode | Additional Comments   |
|---------|---|
| 9NXWKP  | Extraction: In-situ extraction method was used to extract DNA from Item 1 and Item 2. Chelex extraction method was used to extract DNA from Item 3 and Item 4. Quantification: DNA quantitation for Item 3 and Item 4 were carried out using the Quantifiler Human DNA Quantification kit with Applied Biosystem Real Time Polymerase Chain Reaction (PCR) 7500 system. Amplification: Amplification of STR (Short Tandem Repeat) genetic loci for Item 1 and Item 2 were carried out using the AmpFISTR Identifiler Direct Amplification Kit and Item 3 and Item 4 were amplified using the AmpFISTR Identifiler Plus PCR Amplification Kit. Amplification of Y-STR (Y-Short Tandem Repeat) genetic loci for Item 2, Item 3 and Item 4 were carried out using the AmpFISTR Y-filer PCR Amplification kit. Electrophoresis: Capillary electrophoresis for Item 1,2,3 and 4 were carried out using the Applied Biosystems 3500xl Genetic Analyzer with GeneMapper ID-X Software. Quality Control: Reagent blank, positive control and negative control were carried out throughout the analysis and all gave intended results. |
| 9QAJ6P  | NR = no result  |
| A6LKEK  | Abbreviations - NR: No Results.   |
| ADY9CT  | N.R. (= No Results) entered for DYS391 in female profiles (e.g. Item 1).  |
| APBNBL  | STRmix analysis was conducted on this test. The data reported out in this test is from analysis using GeneMapper ID-X. NR = no results.   |
| AZB8WL  | NR = No Result - [Initials] 03/28/2022. No comparisons performed. [Initials] 04/07/2022.  |
| B6LNKG  | NR=no results. All data reported was analyzed with Genemapper ID-X. In addition, Item 4e was analyzed using STRmix.   |
| BVBMYF  | NR indicates no results. STRmix analysis was conducted on this test. Data reported out in the test is from analysis using GeneMapper-IDX.   |
| BWBHTK  | NR = No Result [Initials] 03/31/2022  |
| DK4N4C  | STR results: Results are entered only for GlobalFiler loci as casework reporting is on GlobalFiler loci. PowerPlex Fusion 6C is used only for allele verification. STR results: Item 4 (spermic fraction) at locus D12S391 - There is a minor allele 20, which is inconsistent with being a contributor to the overall profile. The average peak height ratio of allele 20 to allele 21 is 19.71%, exceeding the Laboratory's stutter threshold for this locus of 13.98%. The minor allele 20 is likely to be an elevated stutter.  |
| EHT7HK  | 1. Item 1 and Item 2 were extracted using in-situ method while Item 3 and Item 4 were extracted using Chelex extraction method. 2. Item 3 and Item 4 were quantified using Quantifiler Human DNA Quantification Kit on the Applied Biosystem Real Time Polymerase Chain Reaction (PCR) 7500 System. 3. Item 1 and Item 2 were amplified using AmpFLSTR Identifiler Direct PCR Amplification Kit while Item 3 and Item 4 were amplified using AmpFLSTR Identifiler Plus PCR Amplification Kit on 9700 GeneAmp PCR System. Y-STR (Y-Short Tandem Repeat) amplification was carried out on Item 2, Item 3 and Item 4 using AmpFLSTR Y-filer PCR Amplification kit on the 9700 GeneAmp PCR System. 4. Electrophoresis was carried out on the Applied Biosystems 3500 Genetic Analyser with GeneMapper ID-X Software for Item 1, Item 2, Item 3 and Item 4. 5. Reagent blank, positive control and negative control were analysed throughout the analysis and all gave the intended results.   |
| EQQN4P  | Items 3 and 4 were tested for the presence of human blood using the ABACard HemaTrace test kit. Samples were analyzed on an ABI 3500. NR = No Results.  |

TABLE 5

| WebCode | Additional Comments  |
|---------|--|
| EVH3JJ  | Extraction: Item 1 and Item 2 were extracted on FTA card (in-situ extraction). Item 3 was extracted using PrepFiler Express DNA Extraction Kit. Item 4 was extracted using chelex extraction method (differential extraction method). Quantification: Item 3 and Item 4 were quantified using Quantifiler Trio DNA Quantification kit on RT-PCR QuantStudio 5 System. Amplification: Item 1 and Item 2 were amplified using GlobalFiler Express STR kit on ProFlex PCR System. Item 3 and Item 4 were amplified using GlobalFiler STR kit on 9700 GeneAmp PCR System. Y-STR amplification was carried out on Item 2, Item 3 and Item 4 using AmFISTR Y-Filer kit on 9700 GeneAmp PCR System. Electrophoresis: Electrophoresis of GlobalFiler amplicons were carried out on Genetic Analyzer 3500xL for Item 1, Item 2, Item 3 and Item 4. Electrophoresis of Y-Filer amplicons were carried out on Genetic Analyzer 3500xL for Item 2, Item 3 and Item 4. Quality Control: Reagent blank, positive control and negative control were incorporated throughout analysis and all gave intended results. NM - non male |
| F3X4G8  | Item 4 : blood and semen mixture from rag. Item 4 (e): Analysis (drop out probability : 0.10); Prosecution hypothesis : Item1 (victim) / Item 2 (suspect); Defense hypothesis : 2 unknowns. Match parameters: Probability of dropin : 0.05; Theta correction : 0.01. All observed alleles are present in the population statistics. Results: Overall Likelihood Ratio : over one billion. Item 4 (sp): suspect's profil is detected. Overall Likelihood Ratio : over one billion.  |
| FQLUXN  | NR=No Result   |
| G7B4CD  | NR = No Results; STRmix analysis was conducted on this test, data reported out in this test is from analysis using GeneMapper ID-X.  |
| G8BY6H  | NR= No Results   |
| GQXUBA  | NR = no results. STRmix analysis was conducted on this test. The data reported out in this test is from analysis using GeneMapper ID-X.  |
| GXLBAE  | NR= No Result. No comparisons performed. [Initials] 04/11/2022   |
| HFFBQD  | Note: 1) NR=No Results. 2) Conclusions were based on the data obtained from GeneMapper ID-X. 3) STRmix interpretation/investigation was performed on ITEM4F. 4) F fraction = e fraction; M fraction = sp fraction.   |
| HXCZM8  | Results are entered only for GlobalFiler loci as casework reporting is on GlobalFiler loci. Powerplex Fusion 6C is used only for allele verification.  |
| K9KKWD  | Extraction: Item 1 and Item 2 were extracted using in-situ method. Item 3 was extracted using Promega DNA-IQ Purification Kit via TECAN Freedom EVO® HID EVOlutionTM Platform. Item 4 was extracted using differential extraction method. Quantification: Item 3 and Item 4 were quantified using ABI Quantifiler Trio DNA Quantification Kit on ABI QuantStudio 5 Real-Time PCR System. Amplification: Item 1 and Item 2 were amplified using Globalfiler Express (GFE) Kit on ABI Proflex PCR System. Item 3 and Item 4 were amplified using Globalfiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Item 2, Item 3 and Item 4 were amplified using AmpFLSTR Yfiler PCR Amplification Kit on ABI GeneAmp PCR System 9700. Electrophoresis: Electrophoresis were carried out on ABI 3500xL Genetic Analyzer for Item 1, Item 2, Item 3 and Item 4. Quality Control: Reagent Blank, Positive Control and Negative Control were carried out through analysis and all gave intended results. NM: Non-male allele   |
| KWVGYF  | Item 4sp: additional 20 peak at D12 may be attributed to elevated stutter (observed stutter percentage: 19.24%; [Laboratory] validated stutter percentage: 14.79%).  |
| L66AJA  | The epithelial fraction of Item 4 (CTS2207-0007-E-02) was a mixture of two individuals, where the deduced major component matches the Victim and the deduced minor component matches the Suspect. Denotations: { } = Imbalanced Alleles, [ ] = Minor Component. For the epithelial fraction of Item 4 at the D2S1338 locus, the major component was deduced as 21,26 and the minor component was deduced as 17,24.   |
| LQ6LBG  | NR = No Result. No comparisons performed [Initials] 4/13/22.   |

TABLE 5

| WebCode | Additional Comments  |
|---------|--|
| MHRUM4  | Item 1 - female profile (No Y-STR analysis undertaken)   |
| NJD32X  | Results are entered only for GlobalFiler loci as casework reporting is on GlobalFiler loci. PowerPlex Fusion 6C is used only for allele verification. Item 2 at locus D2S1338 (GlobalFiler)– There is a minor allele 23, which is inconsistent with being a contributor to the overall profile. The peak height ratio of allele 23 to allele 24 is 14.44%, exceeding the Laboratory's stutter threshold for this locus of 12.74%. The minor allele 23 is likely to be an elevated stutter. Item 2 at locus DYS627 (YFiler Plus) – There is a minor allele 22.2, which is inconsistent with being a contributor to the overall profile. The peak height ratio of allele 22.2 to allele 23 is 4.71%, exceeding the Laboratory's stutter threshold for this locus of 3.04%. The minor allele 22.2 is likely to be an elevated stutter. Item 4sp at locus D12S391 (GlobalFiler)– There is a minor allele 20, which is inconsistent with being a contributor to the overall profile. The average peak height ratio of allele 20 to allele 21 is 16.28%, exceeding the Laboratory's stutter threshold for this locus of 13.98%. The minor allele 20 is likely to be an elevated stutter. |
| PCEV4A  | ND= Not detected   |
| QWR3T8  | Peaks modeled as stutter were not included in the allele tables  |
| QWX28Q  | Y-STR not performed on Item 1 because it gave no T.Y value with Quantifiler Trio.  |
| R4PY8X  | Results are entered only for GlobalFiler loci as casework reporting is on GlobalFiler loci. PowerPlex Fusion 6C is used only for allele verification. Sample Item 2 at locus DYS448 – There is a minor allele 18, which is inconsistent with being a contributor to the overall profile. The average peak height ratio of allele 18 to allele 19 is 6.00%, exceeding the Laboratory's stutter threshold for this locus of 5.06%. The minor allele 18 is likely to be an elevated stutter.  |
| R8UK4B  | NR=NO RESULTS. Sperm identified on Item 4. Human blood identified on Items 3 and 4 using the Hematrace test.   |
| RNCTWY  | NR=no results, STRmix analysis was conducted on this test, data reported out in this test is from analysis using GeneMapper ID-X.  |
| RNYYGX  | Results are entered only for GlobalFiler loci as casework reporting is on GlobalFiler loci. Powerplex Fusion 6C is used only for allele verification.  |
| RPBNQ3  | NR =No Result  |
| RX4YXC  | ND=no data. A portion of the extract from Items 3 and 4 was tested for the presence of human blood using the HemaTrace test. Human blood was detected. NOTE: The ABACard HemaTrace test kit is known to cross-react with some species of the Mustelidae family and with higher primates.   |
| TFG3XA  | NR = No Result. No comparisons performed. [Initials] 4/7/2022  |
| TLNE9N  | Y-STR analysis was not performed on Item 1 because no male DNA was detected using Quantifiler Trio.  |
| TXJHHA  | NR= no results   |
| TXY238  | Technical Review (Ownership Review) PT   |
| U3C4P3  | Item 4: 2 person mix profile - support for contrib > 100 billion for Suspect. Item 4: 2 person mix profile - support for contrib > 100 billion for Complainant.  |
| U6D6PZ  | NR = no result. STR results for Item 3: Peak observed below stochastic threshold (74 rfu) in bin for allele 31 that cannot be differentiated from an artifact. Reported peak 31.2 at 15,327 rfu. [Initials] 04/06/2022   |

TABLE 5

| WebCode | Additional Comments   |
|---------|---|
| X3DFN3  | Extraction: Item 3 and Item 4 were extracted using the Chelex extraction method. Quantification: Item 3 and Item 4 were quantified using the Quantifiler Human DNA Quantification Kit on Applied Biosystems 7500 Real-Time PCR Systems. Amplification: Item 1 and Item 2 were amplified using the AmpFLSTR Identifiler Direct PCR Amplification Kit on Applied Biosystems GeneAmp PCR System 9700. By using the in-situ method, Item 1 and Item 2 were also amplified using the AmpFLSTR Identifiler Yfiler PCR Amplification Kit on Applied Biosystems GeneAmp PCR System 9700. Item 3 and Item 4 were amplified using the AmpFLSTR Identifiler Plus and Yfiler PCR Amplification Kits on Applied Biosystems GeneAmp PCR System 9700. Electrophoresis: Electrophoresis was carried out on the Applied Biosystems 3500XL Genetic Analyzer and the data were analyzed with GeneMapper ID-X v1.5 software. Quality control: Reagent Blank, Positive Control and Negative Control were included throughout the analysis and all gave intended results. |
| XC8DL3  | Technical Review (Ownership Review) PT  |
| XCNGA3  | Extraction: Item 3 and Item 4 were extracted using chelex extraction method. Quantification: Item 3 and Item 4 were quantified using Quantifiler Human DNA Quantification Kit by Real Time PCR 7500. Amplification: Item 1 and Item 2 were amplified using AmpFLSTR Identifiler Direct Kit on 9700 GeneAmp PCR System. Item 3 and Item 4 were amplified using AmpFLSTR Identifiler Plus Kit on 9700 GeneAmp PCR System. Item 2, Item 3 and Item 4 were amplified using AmpFLSTR YFiler Kit on the 9700 GeneAmp PCR System. Electrophoresis: Electrophoresis for Identifiler Direct PCR products of Item 1 and Item 2 were using Genetic Analyzer 3500xl. Electrophoresis for Identifiler Plus PCR products of Item 3 and Item 4 were using Genetic Analyzer 3500xl. Electrophoresis for Y Filer PCR products of Item 2, Item 3 and Item 4 were using Genetic Analyzer 3500xl. Quality Control: Reagent blank, positive control and negative control were carried out through analysis and all gave the intended results.                            |
| XGXR4H  | Y-STR analysis was not performed on item 1 because no male DNA was detected using Quantifiler Trio.   |
| XNHTKV  | STRmix analysis conducted on samples in this test. Data reported out in this test is from analysis using GeneMapper ID-X. NR=no results.  |
| XRWJUW  | NR-No Results   |
| YRXMZR  | NR = No Results. STRmix analysis was conducted on this test. Data reported out in this test is from analysis using Genemapper ID-X.   |
| ZARTPX  | Additional MAS stutter observed, and these peaks modeled as stutter were not included in the allele table per lab policy, were as follows: 1.4NS -- D1S1656 -- 12; D19S433 -- 14; and DYS576 -- 18.   |
| ZAUM94  | Sperm cells were confirmed through microscopic examination. NR = No results.  |

-End of Report-  
(Appendix may follow)

**Collaborative Testing Services ~ Forensic Testing Program**

**Test No. 22-5802: DNA-Semen**

**DATA MUST BE SUBMITTED BY May 2, 2022, 11:59 p.m. TO BE INCLUDED IN THE REPORT**

Participant Code: U1234A

WebCode: 34C3FN

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 that occurred in a vehicle involving a female victim and male suspect. The victim told police she took a taxi home from work and the male suspect was her driver. She reports the male went off route and pulled over at an unknown location. The suspect forced the victim to have sex with him in the back seat and used a rag to clean himself off. The victim punched the suspect several times and was able to escape. Police have apprehended the suspect that same day using the license plate number provided by the victim. Police are submitting a stain from the shirt the suspect was wearing (Item 3) and a stain from the rag found inside the vehicle (Item 4). Screening tests have been performed on both samples with the following results: Item 3 (suspect's shirt) is positive for blood, and Item 4 (rag) is positive for blood and semen. Also provided are known standards from the female victim (Item 1) and male suspect (Item 2).

**Items Submitted (Sample Pack S2):**

Item 1: Known blood from the female victim

Item 2: Known blood from the male suspect

Item 3: Questioned blood stain from suspect's shirt (yellow)

Item 4: Questioned blood and semen mixture from rag (blue)

### *Part I: 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 (if applicable):

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

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

**YSTR 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. Plus, 23, etc.).

YFiler™  PowerPlex® Y  Other

*Alleles below are sorted in Default order.*

**Part I (continued): DNA Results for Known Item 2**

- 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 (if applicable): \_\_\_\_\_

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

|             |         |         |          |          |            |         |
|-------------|---------|---------|----------|----------|------------|---------|
| <b>ITEM</b> | D1S1656 | D2S1338 | D2S441   | D3S1358  | D5S818     | D6S1043 |
| 2           |         |         |          |          |            |         |
| <b>ITEM</b> | D7S820  | D8S1179 | D10S1248 | D12S391  | D13S317    | D16S539 |
| 2           |         |         |          |          |            |         |
| <b>ITEM</b> | D18S51  | D19S433 | D21S11   | D22S1045 | Amelogenin | CSF1PO  |
| 2           |         |         |          |          |            |         |
| <b>ITEM</b> | FGA     | Penta D | Penta E  | SE33     | TH01       | TPOX    |
| 2           |         |         |          |          |            |         |
| <b>ITEM</b> | vWA     | DYS391  | DYS570   | DYS576   | Y Indel    |         |
| 2           |         |         |          |          |            |         |

**YSTR 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. Plus, 23, etc.).

YFiler™  PowerPlex® Y  Other

*Alleles below are sorted in Default order.*

**Part I (continued): DNA Results for Questioned Item 3**

- Report alleles in numerical order, separated by a comma.
  - Follow your laboratory procedures for reporting homozygotes (i.e. X,X or X) and null responses.
  - 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.).

 Identifier®

 GlobalFiler™

Investigator® 24plex

 PowerPlex®

## Other

Report the Probabilistic Genotyping Software Used (if applicable):

Did you perform a differential extraction of Item 3? YES  NO

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

|             |         |         |          |          |            |         |
|-------------|---------|---------|----------|----------|------------|---------|
| <b>ITEM</b> | D1S1656 | D2S1338 | D2S441   | D3S1358  | D5S818     | D6S1043 |
| 3           |         |         |          |          |            |         |
| 3 e         |         |         |          |          |            |         |
| 3 sp        |         |         |          |          |            |         |
| <b>ITEM</b> | D7S820  | D8S1179 | D10S1248 | D12S391  | D13S317    | D16S539 |
| 3           |         |         |          |          |            |         |
| 3 e         |         |         |          |          |            |         |
| 3 sp        |         |         |          |          |            |         |
| <b>ITEM</b> | D18S51  | D19S433 | D21S11   | D22S1045 | Amelogenin | CSF1PO  |
| 3           |         |         |          |          |            |         |
| 3 e         |         |         |          |          |            |         |
| 3 sp        |         |         |          |          |            |         |
| <b>ITEM</b> | FGA     | Penta D | Penta E  | SE33     | TH01       | TPOX    |
| 3           |         |         |          |          |            |         |
| 3 e         |         |         |          |          |            |         |
| 3 sp        |         |         |          |          |            |         |
| <b>ITEM</b> | vWA     | DYS391  | DYS570   | DYS576   | Y Indel    |         |
| 3           |         |         |          |          |            |         |
| 3 e         |         |         |          |          |            |         |
| 3 sp        |         |         |          |          |            |         |

**YSTR 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. Plus, 23, etc.).

 YFiler™

PowerPlex® Y

Other

Did you perform a differential extraction of Item 3? YES  NO

*Alleles below are sorted in Default order.*

**Part I (continued): DNA Results for Questioned Item 4**

- Report alleles in numerical order, separated by a comma.
  - Follow your laboratory procedures for reporting homozygotes (i.e. X,X or X) and null responses.
  - 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 (if applicable):

Did you perform a differential extraction of Item 4? YES  NO

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

|             |         |         |          |          |            |         |
|-------------|---------|---------|----------|----------|------------|---------|
| <b>ITEM</b> | D1S1656 | D2S1338 | D2S441   | D3S1358  | D5S818     | D6S1043 |
| 4           |         |         |          |          |            |         |
| 4 e         |         |         |          |          |            |         |
| 4 sp        |         |         |          |          |            |         |
| <b>ITEM</b> | D7S820  | D8S1179 | D10S1248 | D12S391  | D13S317    | D16S539 |
| 4           |         |         |          |          |            |         |
| 4 e         |         |         |          |          |            |         |
| 4 sp        |         |         |          |          |            |         |
| <b>ITEM</b> | D18S51  | D19S433 | D21S11   | D22S1045 | Amelogenin | CSF1PO  |
| 4           |         |         |          |          |            |         |
| 4 e         |         |         |          |          |            |         |
| 4 sp        |         |         |          |          |            |         |
| <b>ITEM</b> | FGA     | Penta D | Penta E  | SE33     | TH01       | TPOX    |
| 4           |         |         |          |          |            |         |
| 4 e         |         |         |          |          |            |         |
| 4 sp        |         |         |          |          |            |         |
| <b>ITEM</b> | vWA     | DYS391  | DYS570   | DYS576   | Y Indel    |         |
| 4           |         |         |          |          |            |         |
| 4 e         |         |         |          |          |            |         |
| 4 sp        |         |         |          |          |            |         |

**YSTR 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. Plus, 23, etc.).

YFiler™  PowerPlex® Y  Other

Did you perform a differential extraction of Item 4? YES  NO

*Alleles below are sorted in Default order.*

## Part I (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

## 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               | <input type="radio"/> | <input type="radio"/>  |        | <input type="radio"/>   | <input type="radio"/> |
| No                | <input type="radio"/> | <input type="radio"/>  |        | <input type="radio"/>   | <input type="radio"/> |
| Inconclusive      | <input type="radio"/> | <input type="radio"/>  |        | <input type="radio"/>   | <input type="radio"/> |
| No Interpretation | <input type="radio"/> | <input type="radio"/>  |        | <input type="radio"/>   | <input type="radio"/> |

DNA interpretations not reported; samples analyzed for database purposes only:

## Part III: 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.
- Any interpretations based on the results obtained should be indicated in the section above.
- 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.

**Please note:** Any additional formatting applied in the free form space below will not transfer to the Summary Report and may cause your information to be illegible. This includes additional spacing and returns that present your responses in lists and tabular formats.

## RELEASE OF DATA TO ACCREDITATION BODIES

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

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

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

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

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

ANAB Certificate No.  
(Include ASCLD/LAB Certificate here)

A2LA Certificate No.

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

Authorized Contact Person and Title

Laboratory Name

Location (City/State)