



Collaborative Testing Services, Inc.

FORENSIC TESTING PROGRAM

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## *Manufacturer's Information*

# **Test No. 19-5872: DNA - Parentage**

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Each sample set was a collection of known blood samples, provided on FTA Micro cards, from three individuals (Items 1-3); a mother, a daughter, and a potential father. Participants were requested to analyze these items using their existing protocols. Also included with this test was a kinship exercise that consisted of autosomal DNA profiles of two individuals for comparison. Participants were requested to determine if a grandchild and grandparent relationship claim was supported following the review of these profiles.

**SAMPLE PREPARATION:** All stains were prepared from human whole blood which was drawn into EDTA tubes. Item 1 (75  $\mu$ l) was blood from a female (mother) donor, Item 2 (75  $\mu$ l) was blood from a female (daughter) donor, and Item 3 (75  $\mu$ l) was blood from a male donor who was not the biological father of the Item 2 female. The different items were prepared at separate times and were packaged once they were thoroughly dried. Completed sample sets were stored at -20°C until shipment on August 27, 2019.

**SAMPLE SET ASSEMBLY:** For each sample set, all three Items (1-3) in their separate envelopes were placed in a pre-labeled sample pack envelope and sealed. The 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.

**KINSHIP EXERCISE:** This exercise included allelic results representing a grandchild and grandparent relationship.

**VERIFICATION:** Laboratories that conducted predistribution analysis of the samples reported consistent results and associations.

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**Manufacturer's Information, continued**  
**Test No. 19-5872: DNA - Parentage**

<b>Amelogenin and STR Results</b>						
<i>Results compiled from predistribution laboratories and a consensus of at least 10 participants.</i>						
<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>	
1	15,17.3	17,25	10,10	15,18	10,11	*
	7,10	11,13	13,16	20,20	10,12	11,13
	12,12	14,15	30,30	14,16	X,X	11,12
	21,26	9,10	10,14	16,31.2	6,7	8,12
	14,17	NM	NM	NM	NM	
2	15,15.3	17,25	10,11	15,15	11,11	*
	10,10	11,14	13,14	20,22	10,12	13,13
	12,12	14,15	30,30	15,16	X,X	12,12
	20,26	10,12	9,14	16,23.2	6,6	8,12
	14,18	NM	NM	NM	NM	
3	11,16	19,25	10,12	15,15	7,12	*
	10,10	11,14	13,14	19,20	9,12	12,13
	14,20	13,14	29,30	15,17	X,Y	10,11
	20,22	12,13	9,26	23.2,29.2	9,9	8,8
	11,16	10	17	18	2	

<b>YSTR Results</b>									
<i>Results compiled from predistribution laboratories and a consensus of at least 10 participants.</i>									
<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>YGATAH4</b>
3	35,36	14	11,14	14	30	25	10	13	13
	15	12	13	19	31	15	17	10	22
	37	12	13	17	18	23	23	10	12

<b>Paternity Indices</b>						
<i>Median Paternity Index results compiled from predistribution laboratories and a consensus of at least 10 participants.</i>						
<b>Database</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>					
NIST-STRBase	0	2.0169	0	3.1056	0	*
	3.2552	1.90323	1.4749	0	1.4915	3.7453
	0	1.0216	1.8295	1.17413	*	0
3PI	5.9	*	*	21.4592	0	1.6977
	0					

\* Results were not received from a minimum of 10 participants for the loci indicated.  
 NM - Non-Male profile, YSTR results not expected.

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