Cell line Authentication Report

Customer Information

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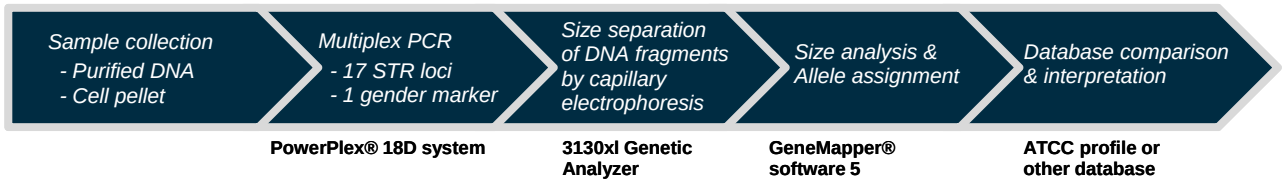
Sample Information

Sample No.	Sample name	Sample type	Reference profile
1	*ARPE-19*	*Cell pellet*	*CRL-2302*
2			
3			
4			
5			
6			
7			
8			
9			
10			

STR Profiling Workflow



Data Interpretation

Cell lines were authenticated using Short Tandem Repeat (STR) analysis as described in 2012 in ANSI Standard (ASN-0002) by the ATCC Standards Development Organization (SDO) and in Reid et al., Authentication of Human Cell Lines by STR DNA Profiling Analysis. Assay Guidance Manual [Internet], 2013 May 1 published by NCBI. The match criterion is based on an algorithm that compares the number of shared alleles between the reference and sample profile.

$$\%\ Match = \frac{Number\ of\ shared\ alleles}{Total\ number\ of\ alleles\ in\ the\ reference\ database\ profile}$$

** Homozygous alleles are counted as one allele*

Lowest % Match	*Result interpretation*
≥ 80%	*This result is consistent with the two samples being* **related** *(same donor)*
56-79%	*This result is* **indeterminant** *and may need further testing*
≤55%	*This result is consistent with the two samples being* **unrelated** *(different donors)*

Sample No. *1*

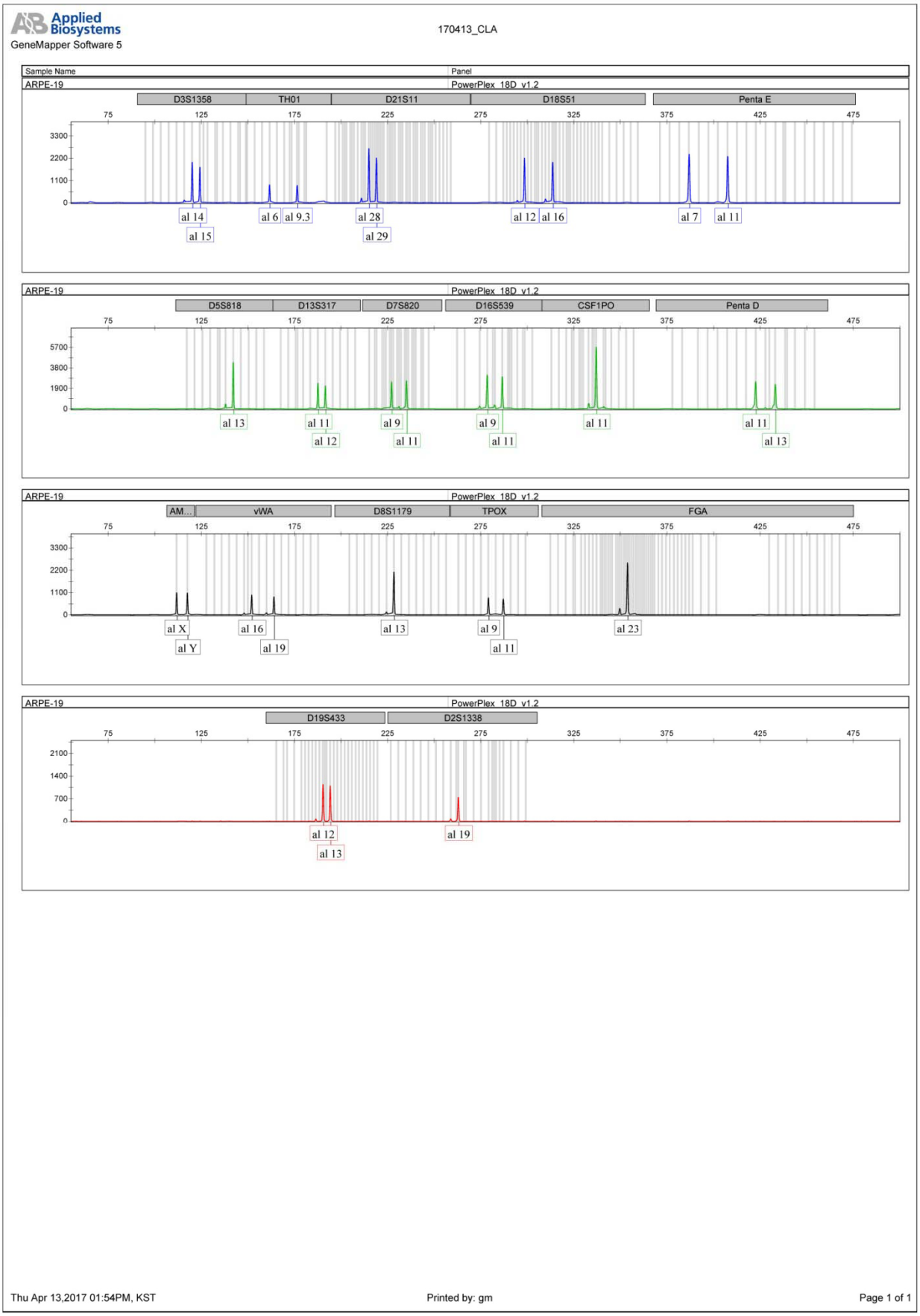
Match Analysis

Locus	Reference Database Profile		Sample Profile		Shared alleles #
	Database : ARPE-19 (ATCC CRL-2302)		Sample Name : ARPE-19		
D5S818	*13*		*13*		*1*
D13S317	*11*	*12*	*11*	*12*	*2*
D7S820	*9*	*11*	*9*	*11*	*2*
D16S539	*9*	*11*	*9*	*11*	*2*
vWA	*16*	*19*	*16*	*19*	*2*
TH01	*6*	*9.3*	*6*	*9.3*	*2*
TPOX	*9*	*11*	*9*	*11*	*2*
CSF1PO	*11*		*11*		*1*
AMEL	*X*	*Y*	*X*	*Y*	*2*
D3S1358			*14*	*15*	-
D21S11			*28*	*29*	-
D18S51			*12*	*16*	-
D8S1179			*13*		-
FGA			*23*		-
D2S1338			*19*		-
D19S433			*12*	*13*	-
Penta D			*11*	*13*	-
Penta E			*7*	*11*	-

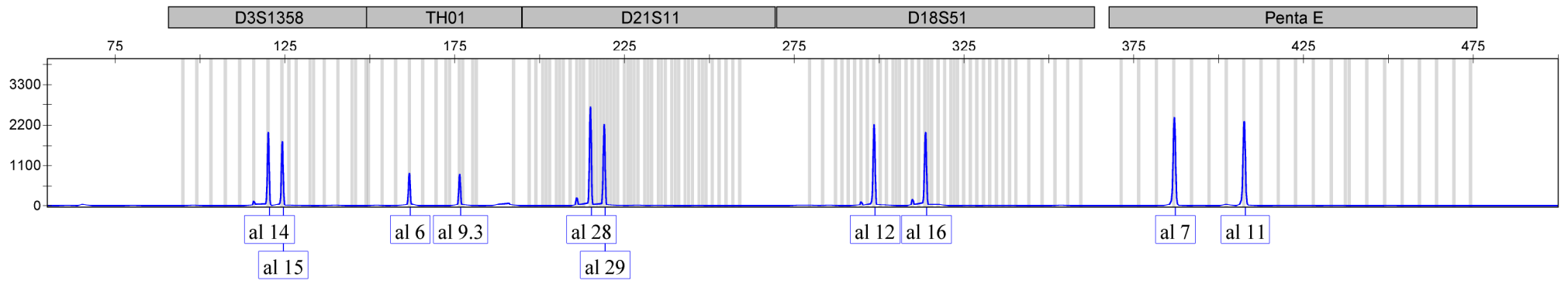
Number of shared alleles	*16*
Total number of alleles in the reference database profile	*16*
% match	*100.0%*
Result interpretation	**Related**

Sample No. *1*

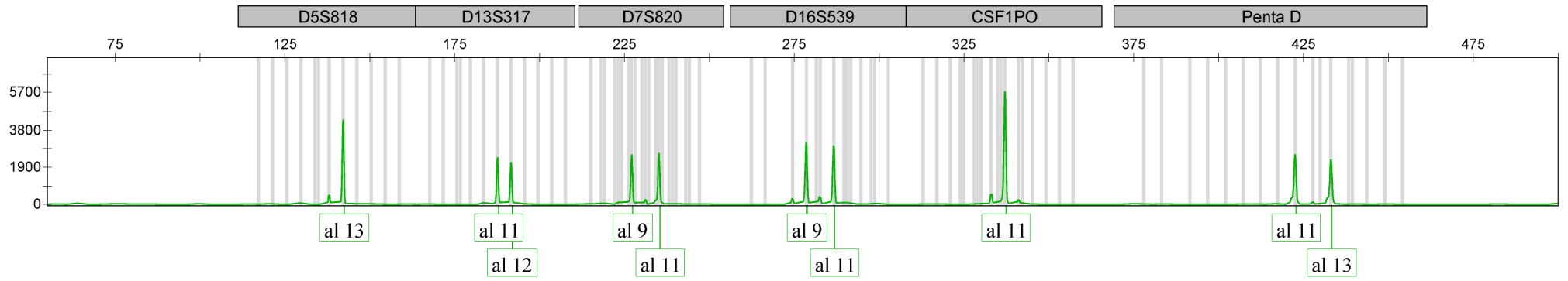
Electropherogram



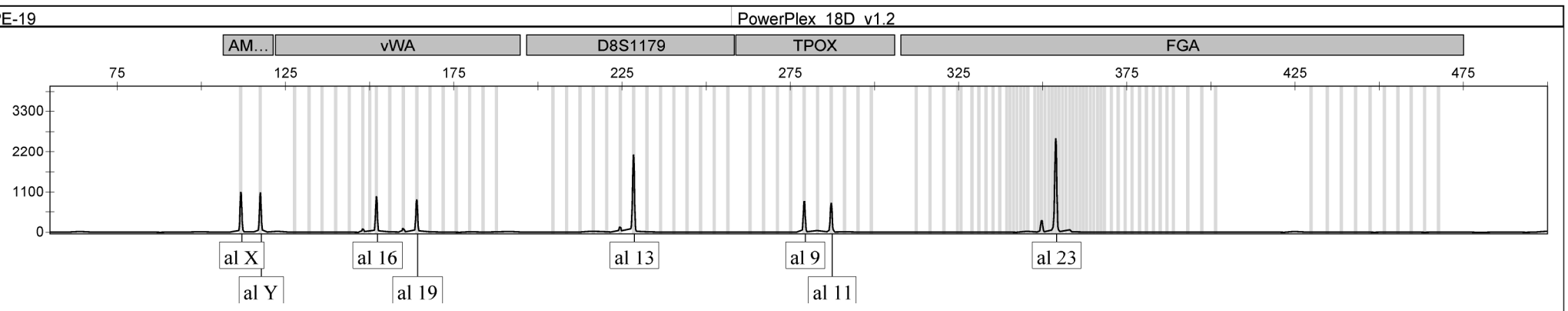
Sample Name	Panel
ARPE-19	PowerPlex_18D_v1.2



ARPE-19	PowerPlex_18D_v1.2



ARPE-19	PowerPlex_18D_v1.2



ARPE-19	PowerPlex_18D_v1.2