

DNA SOP-41 - Stutters and Controls for Current STR Kits

Document ID: 13783
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Status: Published
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Approved by Director: Dr. Guy Vallaro

41.1 Stutter Thresholds
41.1.1 GlobalFiler

GlobalFiler Standard (STD) and Low Amp Data Stutter Thresholds (≤29 cycles)

Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D3S1358	8	6.9	9.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	8.1	6.9	9.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	8.2	6.9	9.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	8.3	6.9	9.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	9	6.9	9.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	9.1	6.9	9.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	9.2	6.9	9.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	9.3	6.9	9.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	10	7.6	10.4	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	10.1	7.6	10.4	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	10.2	7.6	10.4	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	10.3	7.6	10.4	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	11	8.3	11.1	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	11.1	8.3	11.1	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	11.2	8.3	11.1	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	11.3	8.3	11.1	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	12	9	11.8	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	12.1	9	11.8	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	12.2	9	11.8	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	12.3	9	11.8	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	13	9.8	12.6	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	13.1	9.8	12.6	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	13.2	9.8	12.6	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	13.3	9.8	12.6	4.6	6.4	1.3	2.3	1.6	1.6	0	0
D3S1358	14	10.5	13.3	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	14.1	10.5	13.3	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	14.2	10.5	13.3	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	14.3	10.5	13.3	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	15	11.2	14	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	15.1	11.2	14	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	15.2	11.2	14	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	15.3	11.2	14	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	16	11.9	14.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	16.1	11.9	14.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	16.2	11.9	14.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	16.3	11.9	14.7	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	17	12.6	15.4	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	17.1	12.6	15.4	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	17.2	12.6	15.4	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	17.3	12.6	15.4	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	18	13.3	16.1	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	18.1	13.3	16.1	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	18.2	13.3	16.1	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	18.3	13.3	16.1	4.6	6.4	1.3	2.3	1.6	1.6	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D3S1358	19	14	16.8	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	19.1	14	16.8	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	19.2	14	16.8	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	19.3	14	16.8	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	20	14.7	17.5	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	20.1	14.7	17.5	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	20.2	14.7	17.5	4.6	6.4	1.3	2.3	1.6	1.6	0	0
	20.3	14.7	17.5	4.6	6.4	1.3	2.3	1.6	1.6	0	0
D3S1358	21	15.4	18.2	4.6	6.4	1.3	2.3	1.6	1.6	0	0
vWA	10	7.9	12.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	10.1	7.9	12.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	10.2	7.9	12.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	10.3	7.9	12.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	11	7.9	12.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	11.1	7.9	12.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	11.2	7.9	12.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	11.3	7.9	12.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	12	8.7	13.6	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	12.1	8.7	13.6	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	12.2	8.7	13.6	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	12.3	8.7	13.6	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	13	9.5	14.4	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	13.1	9.5	14.4	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	13.2	9.5	14.4	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	13.3	9.5	14.4	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	14	10.4	15.3	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	14.1	10.4	15.3	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	14.2	10.4	15.3	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	14.3	10.4	15.3	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	15	11.2	16.1	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	15.1	11.2	16.1	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	15.2	11.2	16.1	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	15.3	11.2	16.1	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	16	12.1	17	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	16.1	12.1	17	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	16.2	12.1	17	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	16.3	12.1	17	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	17	12.9	17.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	17.1	12.9	17.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
vWA	17.2	12.9	17.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	17.3	12.9	17.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	18	13.7	18.6	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	18.1	13.7	18.6	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	18.2	13.7	18.6	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	18.3	13.7	18.6	2.7	2.7	2.1	2.1	1.7	1.7	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	19	14.6	19.5	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	19.1	14.6	19.5	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	19.2	14.6	19.5	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	19.3	14.6	19.5	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	20	15.4	20.3	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	20.1	15.4	20.3	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	20.2	15.4	20.3	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	20.3	15.4	20.3	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	21	16.3	21.2	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	21.1	16.3	21.2	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	21.2	16.3	21.2	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	21.3	16.3	21.2	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	22	17.1	22	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	22.1	17.1	22	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	22.2	17.1	22	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	22.3	17.1	22	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	23	17.9	22.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	23.1	17.9	22.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	23.2	17.9	22.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	23.3	17.9	22.8	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	24	18.8	23.7	2.7	2.7	2.1	2.1	1.7	1.7	0	0
vWA	24.1	18.8	23.7	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	24.2	18.8	23.7	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	24.3	18.8	23.7	2.7	2.7	2.1	2.1	1.7	1.7	0	0
	25	19.6	24.5	2.7	2.7	2.1	2.1	1.7	1.7	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D16S539	4	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	4.1	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	4.2	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	4.3	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	5	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	5.1	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	5.2	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	5.3	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	6	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	6.1	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	6.2	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	6.3	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	7	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	7.1	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	7.2	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	7.3	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	8	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	8.1	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	8.2	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	8.3	5.8	10.9	2.3	2.3	1	1	1	1	0	0
	9	6.7	11.8	2.3	2.3	1	1	1	1	0	0
D16S539	9.1	6.7	11.8	2.3	2.3	1	1	1	1	0	0
	9.2	6.7	11.8	2.3	2.3	1	1	1	1	0	0
	9.3	6.7	11.8	2.3	2.3	1	1	1	1	0	0
	10	7.5	12.6	2.3	2.3	1	1	1	1	0	0
	10.1	7.5	12.6	2.3	2.3	1	1	1	1	0	0
	10.2	7.5	12.6	2.3	2.3	1	1	1	1	0	0
	10.3	7.5	12.6	2.3	2.3	1	1	1	1	0	0
	11	8.4	13.5	2.3	2.3	1	1	1	1	0	0
	11.1	8.4	13.5	2.3	2.3	1	1	1	1	0	0
	11.2	8.4	13.5	2.3	2.3	1	1	1	1	0	0
	11.3	8.4	13.5	2.3	2.3	1	1	1	1	0	0
	12	9.3	14.4	2.3	2.3	1	1	1	1	0	0
	12.1	9.3	14.4	2.3	2.3	1	1	1	1	0	0
	12.2	9.3	14.4	2.3	2.3	1	1	1	1	0	0
	12.3	9.3	14.4	2.3	2.3	1	1	1	1	0	0
	13	10.1	15.2	2.3	2.3	1	1	1	1	0	0
	13.1	10.1	15.2	2.3	2.3	1	1	1	1	0	0
	13.2	10.1	15.2	2.3	2.3	1	1	1	1	0	0
	13.3	10.1	15.2	2.3	2.3	1	1	1	1	0	0
	14	11	16.1	2.3	2.3	1	1	1	1	0	0
D16S539	14.1	11	16.1	2.3	2.3	1	1	1	1	0	0
	14.2	11	16.1	2.3	2.3	1	1	1	1	0	0
	14.3	11	16.1	2.3	2.3	1	1	1	1	0	0
	15	11.9	17	2.3	2.3	1	1	1	1	0	0
	15.1	11.9	17	2.3	2.3	1	1	1	1	0	0
	15.2	11.9	17	2.3	2.3	1	1	1	1	0	0
	15.3	11.9	17	2.3	2.3	1	1	1	1	0	0
	16	12.8	17.9	2.3	2.3	1	1	1	1	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
CSF1PO	5	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	5.1	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	5.2	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	5.3	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	6	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	6.1	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	6.2	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	6.3	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	7	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	7.1	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	7.2	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	7.3	4.1	8.7	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	8	4.9	9.5	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	8.1	4.9	9.5	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	8.2	4.9	9.5	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	8.3	4.9	9.5	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	9	5.8	10.4	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	9.1	5.8	10.4	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	9.2	5.8	10.4	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	9.3	5.8	10.4	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	10	6.7	11.3	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	10.1	6.7	11.3	2.2	2.2	0.9	0.9	0	0	1.6	1.6
CSF1PO	10.2	6.7	11.3	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	10.3	6.7	11.3	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	11	7.6	12.2	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	11.1	7.6	12.2	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	11.2	7.6	12.2	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	11.3	7.6	12.2	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	12	8.4	13	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	12.1	8.4	13	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	12.2	8.4	13	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	12.3	8.4	13	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	13	9.3	13.9	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	13.1	9.3	13.9	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	13.2	9.3	13.9	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	13.3	9.3	13.9	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	14	10.2	14.8	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	14.1	10.2	14.8	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	14.2	10.2	14.8	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	14.3	10.2	14.8	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	15	11	15.6	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	15.1	11	15.6	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	15.2	11	15.6	2.2	2.2	0.9	0.9	0	0	1.6	1.6
	15.3	11	15.6	2.2	2.2	0.9	0.9	0	0	1.6	1.6
CSF1PO	16	11.9	16.5	2.2	2.2	0.9	0.9	0	0	1.6	1.6

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
TPOX	4	2	4.5	1.4	1.4	0	0	0	0	0	0
	4.1	2	4.5	1.4	1.4	0	0	0	0	0	0
	4.2	2	4.5	1.4	1.4	0	0	0	0	0	0
	4.3	2	4.5	1.4	1.4	0	0	0	0	0	0
	5	2	4.5	1.4	1.4	0	0	0	0	0	0
	5.1	2	4.5	1.4	1.4	0	0	0	0	0	0
	5.2	2	4.5	1.4	1.4	0	0	0	0	0	0
	5.3	2	4.5	1.4	1.4	0	0	0	0	0	0
	6	2	4.5	1.4	1.4	0	0	0	0	0	0
TPOX	6.1	2	4.5	1.4	1.4	0	0	0	0	0	0
	6.2	2	4.5	1.4	1.4	0	0	0	0	0	0
	6.3	2	4.5	1.4	1.4	0	0	0	0	0	0
	7	2.5	5	1.4	1.4	0	0	0	0	0	0
	7.1	2.5	5	1.4	1.4	0	0	0	0	0	0
	7.2	2.5	5	1.4	1.4	0	0	0	0	0	0
	7.3	2.5	5	1.4	1.4	0	0	0	0	0	0
	8	3	5.5	1.4	1.4	0	0	0	0	0	0
	8.1	3	5.5	1.4	1.4	0	0	0	0	0	0
	8.2	3	5.5	1.4	1.4	0	0	0	0	0	0
	8.3	3	5.5	1.4	1.4	0	0	0	0	0	0
	9	3.5	6	1.4	1.4	0	0	0	0	0	0
	9.1	3.5	6	1.4	1.4	0	0	0	0	0	0
	9.2	3.5	6	1.4	1.4	0	0	0	0	0	0
	9.3	3.5	6	1.4	1.4	0	0	0	0	0	0
TPOX	10	4	6.5	1.4	1.4	0	0	0	0	0	0
	10.1	4	6.5	1.4	1.4	0	0	0	0	0	0
	10.2	4	6.5	1.4	1.4	0	0	0	0	0	0
	10.3	4	6.5	1.4	1.4	0	0	0	0	0	0
	11	4.6	7.1	1.4	1.4	0	0	0	0	0	0
	11.1	4.6	7.1	1.4	1.4	0	0	0	0	0	0
	11.2	4.6	7.1	1.4	1.4	0	0	0	0	0	0
	11.3	4.6	7.1	1.4	1.4	0	0	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	12	5.1	7.6	1.4	1.4	0	0	0	0	0	0
	12.1	5.1	7.6	1.4	1.4	0	0	0	0	0	0
	12.2	5.1	7.6	1.4	1.4	0	0	0	0	0	0
	12.3	5.1	7.6	1.4	1.4	0	0	0	0	0	0
	13	5.6	8.1	1.4	1.4	0	0	0	0	0	0
	13.1	5.6	8.1	1.4	1.4	0	0	0	0	0	0
	13.2	5.6	8.1	1.4	1.4	0	0	0	0	0	0
	13.3	5.6	8.1	1.4	1.4	0	0	0	0	0	0
	14	6.1	8.6	1.4	1.4	0	0	0	0	0	0
	14.1	6.1	8.6	1.4	1.4	0	0	0	0	0	0
	14.2	6.1	8.6	1.4	1.4	0	0	0	0	0	0
	14.3	6.1	8.6	1.4	1.4	0	0	0	0	0	0
	15	6.6	9.1	1.4	1.4	0	0	0	0	0	0
	15.1	6.6	9.1	1.4	1.4	0	0	0	0	0	0
	15.2	6.6	9.1	1.4	1.4	0	0	0	0	0	0
	15.3	6.6	9.1	1.4	1.4	0	0	0	0	0	0
TPOX	16	7.1	9.6	1.4	1.4	0	0	0	0	0	0
D8S1179	4	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	4.1	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	4.2	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	4.3	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	5	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	5.1	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	5.2	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	5.3	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	6	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	6.1	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	6.2	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	6.3	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	7	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	7.1	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	7.2	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	7.3	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	8	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	8.1	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	8.2	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	8.3	10.4	14.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	9	10.7	14.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	9.1	10.7	14.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	9.2	10.7	14.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	9.3	10.7	14.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	10	11.1	15.2	2.8	3.6	1.4	3	4.3	4.9	4	4
	10.1	11.1	15.2	2.8	3.6	1.4	3	4.3	4.9	4	4
	10.2	11.1	15.2	2.8	3.6	1.4	3	4.3	4.9	4	4
	10.3	11.1	15.2	2.8	3.6	1.4	3	4.3	4.9	4	4
	11	11.4	15.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	11.1	11.4	15.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	11.2	11.4	15.5	2.8	3.6	1.4	3	4.3	4.9	4	4
	11.3	11.4	15.5	2.8	3.6	1.4	3	4.3	4.9	4	4

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D8S1179	12	11.7	15.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	12.1	11.7	15.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	12.2	11.7	15.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	12.3	11.7	15.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	13	12	16.1	2.8	3.6	1.4	3	4.3	4.9	4	4
	13.1	12	16.1	2.8	3.6	1.4	3	4.3	4.9	4	4
	13.2	12	16.1	2.8	3.6	1.4	3	4.3	4.9	4	4
	13.3	12	16.1	2.8	3.6	1.4	3	4.3	4.9	4	4
	14	12.3	16.4	2.8	3.6	1.4	3	4.3	4.9	4	4
	14.1	12.3	16.4	2.8	3.6	1.4	3	4.3	4.9	4	4
	14.2	12.3	16.4	2.8	3.6	1.4	3	4.3	4.9	4	4
	14.3	12.3	16.4	2.8	3.6	1.4	3	4.3	4.9	4	4
	15	12.7	16.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	15.1	12.7	16.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	15.2	12.7	16.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	15.3	12.7	16.8	2.8	3.6	1.4	3	4.3	4.9	4	4
	16	13	17.1	2.8	3.6	1.4	3	4.3	4.9	4	4
	16.1	13	17.1	2.8	3.6	1.4	3	4.3	4.9	4	4
	16.2	13	17.1	2.8	3.6	1.4	3	4.3	4.9	4	4
	16.3	13	17.1	2.8	3.6	1.4	3	4.3	4.9	4	4
	17	13.3	17.4	2.8	3.6	1.4	3	4.3	4.9	4	4
	17.1	13.3	17.4	2.8	3.6	1.4	3	4.3	4.9	4	4
	17.2	13.3	17.4	2.8	3.6	1.4	3	4.3	4.9	4	4
	17.3	13.3	17.4	2.8	3.6	1.4	3	4.3	4.9	4	4
	18	13.6	17.7	2.8	3.6	1.4	3	4.3	4.9	4	4
D8S1179	18.1	13.6	17.7	2.8	3.6	1.4	3	4.3	4.9	4	4
	18.2	13.6	17.7	2.8	3.6	1.4	3	4.3	4.9	4	4
	18.3	13.6	17.7	2.8	3.6	1.4	3	4.3	4.9	4	4
	19	13.9	18	2.8	3.6	1.4	3	4.3	4.9	4	4
	19.1	13.9	18	2.8	3.6	1.4	3	4.3	4.9	4	4
	19.2	13.9	18	2.8	3.6	1.4	3	4.3	4.9	4	4
	19.3	13.9	18	2.8	3.6	1.4	3	4.3	4.9	4	4
	20	14.3	18.4	2.8	3.6	1.4	3	4.3	4.9	4	4
D21S11	23.2	10.6	15.4	2.7	4.4	3.4	3.4	0	0	0	0
	23.3	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	24	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	24.1	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	24.2	10.6	15.4	2.7	4.4	3.4	3.4	0	0	0	0
	24.3	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	25	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	25.1	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	25.2	10.6	15.4	2.7	4.4	3.4	3.4	0	0	0	0
	25.3	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	26	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	26.1	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	26.2	10.6	15.4	2.7	4.4	3.4	3.4	0	0	0	0
	26.3	8	12.8	2.7	4.4	3.4	3.4	0	0	0	0
	27	8.7	13.5	2.7	4.4	3.4	3.4	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	27.1	8.7	13.5	2.7	4.4	3.4	3.4	0	0	0	0
	27.2	10.6	15.4	2.7	4.4	3.4	3.4	0	0	0	0
	27.3	8.7	13.5	2.7	4.4	3.4	3.4	0	0	0	0
	28	9.5	14.3	2.7	4.4	3.4	3.4	0	0	0	0
	28.1	9.5	14.3	2.7	4.4	3.4	3.4	0	0	0	0
	28.2	10.6	15.4	2.7	4.4	3.4	3.4	0	0	0	0
	28.3	9.5	14.3	2.7	4.4	3.4	3.4	0	0	0	0
	29	10.2	15	2.7	4.4	3.4	3.4	0	0	0	0
	29.1	10.2	15	2.7	4.4	3.4	3.4	0	0	0	0
	29.2	10.6	15.4	2.7	4.4	3.4	3.4	0	0	0	0
	29.3	10.2	15	2.7	4.4	3.4	3.4	0	0	0	0
	30	11	15.8	2.7	4.4	3.4	3.4	0	0	0	0
	30.1	11	15.8	2.7	4.4	3.4	3.4	0	0	0	0
	30.2	10.6	15.4	2.7	4.4	3.4	3.4	0	0	0	0
D21S11	30.3	11	15.8	2.7	4.4	3.4	3.4	0	0	0	0
	31	11.7	16.5	2.7	4.4	3.4	3.4	0	0	0	0
	31.1	11.7	16.5	2.7	4.4	3.4	3.4	0	0	0	0
	31.2	11.4	16.2	2.7	4.4	3.4	3.4	0	0	0	0
	31.3	11.7	16.5	2.7	4.4	3.4	3.4	0	0	0	0
	32	12.5	17.3	2.7	4.4	3.4	3.4	0	0	0	0
	32.1	12.5	17.3	2.7	4.4	3.4	3.4	0	0	0	0
	32.2	12.3	17.1	2.7	4.4	3.4	3.4	0	0	0	0
	32.3	12.5	17.3	2.7	4.4	3.4	3.4	0	0	0	0
	33	13.2	18	2.7	4.4	3.4	3.4	0	0	0	0
	33.1	13.2	18	2.7	4.4	3.4	3.4	0	0	0	0
	33.2	13.1	17.9	2.7	4.4	3.4	3.4	0	0	0	0
	33.3	13.2	18	2.7	4.4	3.4	3.4	0	0	0	0
	34	14	18.8	2.7	4.4	3.4	3.4	0	0	0	0
	34.1	14	18.8	2.7	4.4	3.4	3.4	0	0	0	0
	34.2	13.9	18.7	2.7	4.4	3.4	3.4	0	0	0	0
	34.3	14	18.8	2.7	4.4	3.4	3.4	0	0	0	0
D21S11	35	14.7	19.5	2.7	4.4	3.4	3.4	0	0	0	0
	35.1	14.7	19.5	2.7	4.4	3.4	3.4	0	0	0	0
	35.2	14.7	19.5	2.7	4.4	3.4	3.4	0	0	0	0
	35.3	14.7	19.5	2.7	4.4	3.4	3.4	0	0	0	0
	36	15.5	20.3	2.7	4.4	3.4	3.4	0	0	0	0
	36.1	15.5	20.3	2.7	4.4	3.4	3.4	0	0	0	0
	36.2	15.5	20.3	2.7	4.4	3.4	3.4	0	0	0	0
	36.3	15.5	20.3	2.7	4.4	3.4	3.4	0	0	0	0
	37	16.2	21	2.7	4.4	3.4	3.4	0	0	0	0
	37.1	16.2	21	2.7	4.4	3.4	3.4	0	0	0	0
	37.2	16.3	21.1	2.7	4.4	3.4	3.4	0	0	0	0
	37.3	16.2	21	2.7	4.4	3.4	3.4	0	0	0	0
	38	17	21.8	2.7	4.4	3.4	3.4	0	0	0	0
	38.1	17	21.8	2.7	4.4	3.4	3.4	0	0	0	0
	38.2	17.1	21.9	2.7	4.4	3.4	3.4	0	0	0	0
	38.3	17	21.8	2.7	4.4	3.4	3.4	0	0	0	0
D21S11	39	17.7	22.5	2.7	4.4	3.4	3.4	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D18S51	6	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	6.1	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	6.2	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	6.3	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	7	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	7.1	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	7.2	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	7.3	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	8	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	8.1	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	8.2	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	8.3	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	9	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	9.1	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	9.2	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	9.3	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	10	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	10.1	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	10.2	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	10.3	6.2	10.8	3.4	6	0.7	0.7	0	0	0	0
	11	6.9	11.5	3.4	6	0.7	0.7	0	0	0	0
	11.1	6.9	11.5	3.4	6	0.7	0.7	0	0	0	0
	11.2	6.9	11.5	3.4	6	0.7	0.7	0	0	0	0
	11.3	6.9	11.5	3.4	6	0.7	0.7	0	0	0	0
	12	7.6	12.2	3.4	6	0.7	0.7	0	0	0	0
	12.1	7.6	12.2	3.4	6	0.7	0.7	0	0	0	0
	12.2	7.6	12.2	3.4	6	0.7	0.7	0	0	0	0
	12.3	7.6	12.2	3.4	6	0.7	0.7	0	0	0	0
	13	8.3	12.9	3.4	6	0.8	0.8	0	0	0	0
	13.1	8.3	12.9	3.4	6	0.8	0.8	0	0	0	0
D18S51	13.2	8.3	12.9	3.4	6	0.8	0.8	0	0	0	0
	13.3	8.3	12.9	3.4	6	0.8	0.8	0	0	0	0
	14	8.9	13.5	3.4	6	0.9	0.9	0	0	0	0
	14.1	8.9	13.5	3.4	6	0.9	0.9	0	0	0	0
	14.2	8.9	13.5	3.4	6	0.9	0.9	0	0	0	0
	14.3	8.9	13.5	3.4	6	0.9	0.9	0	0	0	0
	15	9.6	14.2	3.4	6	1	1	0	0	0	0
D18S51	15.1	9.6	14.2	3.4	6	1	1	0	0	0	0
	15.2	9.6	14.2	3.4	6	1	1	0	0	0	0
	15.3	9.6	14.2	3.4	6	1	1	0	0	0	0
	16	10.3	14.9	3.4	6	1	1	0	0	0	0
	16.1	10.3	14.9	3.4	6	1	1	0	0	0	0
	16.2	10.3	14.9	3.4	6	1	1	0	0	0	0
	16.3	10.3	14.9	3.4	6	1	1	0	0	0	0
	17	11	15.6	3.4	6	1.1	1.1	0	0	0	0
	17.1	11	15.6	3.4	6	1.1	1.1	0	0	0	0
	17.2	11	15.6	3.4	6	1.1	1.1	0	0	0	0
	17.3	11	15.6	3.4	6	1.1	1.1	0	0	0	0
	18	11.7	16.3	3.4	6	1.2	1.2	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	18.1	11.7	16.3	3.4	6	1.2	1.2	0	0	0	0
	18.2	11.7	16.3	3.4	6	1.2	1.2	0	0	0	0
	18.3	11.7	16.3	3.4	6	1.2	1.2	0	0	0	0
	19	12.3	16.9	3.4	6	1.3	1.3	0	0	0	0
	19.1	12.3	16.9	3.4	6	1.3	1.3	0	0	0	0
	19.2	12.3	16.9	3.4	6	1.3	1.3	0	0	0	0
	19.3	12.3	16.9	3.4	6	1.3	1.3	0	0	0	0
	20	13	17.6	3.4	6	1.4	1.4	0	0	0	0
	20.1	13	17.6	3.4	6	1.4	1.4	0	0	0	0
D18S51	20.2	13	17.6	3.4	6	1.4	1.4	0	0	0	0
	20.3	13	17.6	3.4	6	1.4	1.4	0	0	0	0
	21	13.7	18.3	3.4	6	1.4	1.4	0	0	0	0
	21.1	13.7	18.3	3.4	6	1.4	1.4	0	0	0	0
	21.2	13.7	18.3	3.4	6	1.4	1.4	0	0	0	0
	21.3	13.7	18.3	3.4	6	1.4	1.4	0	0	0	0
	22	14.4	19	3.4	6	1.5	1.5	0	0	0	0
	22.1	14.4	19	3.4	6	1.5	1.5	0	0	0	0
	22.2	14.4	19	3.4	6	1.5	1.5	0	0	0	0
	22.3	14.4	19	3.4	6	1.5	1.5	0	0	0	0
	23	15.1	19.7	3.4	6	1.6	1.6	0	0	0	0
	23.1	15.1	19.7	3.4	6	1.6	1.6	0	0	0	0
	23.2	15.1	19.7	3.4	6	1.6	1.6	0	0	0	0
	23.3	15.1	19.7	3.4	6	1.6	1.6	0	0	0	0
	24	15.7	20.3	3.4	6	1.7	1.7	0	0	0	0
	24.1	15.7	20.3	3.4	6	1.7	1.7	0	0	0	0
	24.2	15.7	20.3	3.4	6	1.7	1.7	0	0	0	0
	24.3	15.7	20.3	3.4	6	1.7	1.7	0	0	0	0
	25	16.4	21	3.4	6	1.8	1.8	0	0	0	0
	25.1	16.4	21	3.4	6	1.8	1.8	0	0	0	0
	25.2	16.4	21	3.4	6	1.8	1.8	0	0	0	0
	25.3	16.4	21	3.4	6	1.8	1.8	0	0	0	0
	26	17.1	21.7	3.4	6	1.8	1.8	0	0	0	0
	26.1	17.1	21.7	3.4	6	1.8	1.8	0	0	0	0
	26.2	17.1	21.7	3.4	6	1.8	1.8	0	0	0	0
	26.3	17.1	21.7	3.4	6	1.8	1.8	0	0	0	0
	27	17.8	22.4	3.4	6	1.9	1.9	0	0	0	0
	27.1	17.8	22.4	3.4	6	1.9	1.9	0	0	0	0
	27.2	17.8	22.4	3.4	6	1.9	1.9	0	0	0	0
	27.3	17.8	22.4	3.4	6	1.9	1.9	0	0	0	0
D18S51	28	18.5	23.1	3.4	6	2	2	0	0	0	0
DYS391	6	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	6.1	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	6.2	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	6.3	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	7	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	7.1	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	7.2	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	7.3	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	8	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	8.1	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	8.2	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	8.3	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	9	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	9.1	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	9.2	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	9.3	7.4	11.8	3.9	3.9	1.4	1.4	0	0	0	0
	10	8.3	12.7	3.9	3.9	1.4	1.4	0	0	0	0
	10.1	8.3	12.7	3.9	3.9	1.4	1.4	0	0	0	0
	10.2	8.3	12.7	3.9	3.9	1.4	1.4	0	0	0	0
	10.3	8.3	12.7	3.9	3.9	1.4	1.4	0	0	0	0
	11	9.2	13.6	3.9	3.9	1.4	1.4	0	0	0	0
	11.1	9.2	13.6	3.9	3.9	1.4	1.4	0	0	0	0
	11.2	9.2	13.6	3.9	3.9	1.4	1.4	0	0	0	0
	11.3	9.2	13.6	3.9	3.9	1.4	1.4	0	0	0	0
	12	10.1	14.5	3.9	3.9	1.4	1.4	0	0	0	0
	12.1	10.1	14.5	3.9	3.9	1.4	1.4	0	0	0	0
	12.2	10.1	14.5	3.9	3.9	1.4	1.4	0	0	0	0
	12.3	10.1	14.5	3.9	3.9	1.4	1.4	0	0	0	0
	13	11	15.4	3.9	3.9	1.4	1.4	0	0	0	0
	13.1	11	15.4	3.9	3.9	1.4	1.4	0	0	0	0
	13.2	11	15.4	3.9	3.9	1.4	1.4	0	0	0	0
	13.3	11	15.4	3.9	3.9	1.4	1.4	0	0	0	0
DYS391	14	11.9	16.3	3.9	3.9	1.4	1.4	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D2S441	8	7	11.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	8.1	7	11.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	8.2	7	11.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	8.3	5.2	9.9	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	9	7	11.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	9.1	7	11.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	9.2	7	11.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	9.3	5.2	9.9	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	10	8.3	13	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	10.1	8.3	13	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	10.2	8.3	13	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	10.3	5.2	9.9	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	11	9.5	14.2	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	11.1	9.5	14.2	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	11.2	9.5	14.2	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	11.3	5.2	9.9	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	12	10.8	15.5	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	12.1	10.8	15.5	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	12.2	10.8	15.5	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	12.3	6	10.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	13	6.2	10.9	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	13.1	6.2	10.9	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	13.2	6.2	10.9	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	13.3	6.8	11.5	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	14	7	11.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	14.1	7	11.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	14.2	7	11.7	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	14.3	7.6	12.3	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	15	7.8	12.5	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	15.1	7.8	12.5	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	15.2	7.8	12.5	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	15.3	8.3	13	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	16	8.5	13.2	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	16.1	8.5	13.2	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	16.2	8.5	13.2	2.7	4.2	1.7	1.7	2.3	3.1	0	0
	16.3	9.1	13.8	2.7	4.2	1.7	1.7	2.3	3.1	0	0
D2S441	17	9.3	14	2.7	4.2	1.7	1.7	2.3	3.1	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D19S433	5.2	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	5.3	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	6	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	6.1	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	6.2	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	6.3	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	7	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	7.1	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	7.2	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	7.3	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	8	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	8.1	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	8.2	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	8.3	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	9	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	9.1	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	9.2	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D19S433	9.3	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	10	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	10.1	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	10.2	6.8	10	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	10.3	6.4	9.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	11	7.2	10.4	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	11.1	7.2	10.4	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	11.2	7.6	10.8	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	11.3	7.2	10.4	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	12	8	11.2	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	12.1	8	11.2	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	12.2	8.3	11.5	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	12.3	8	11.2	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	13	8.7	11.9	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	13.1	8.7	11.9	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	13.2	9.1	12.3	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	13.3	8.7	11.9	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	14	9.5	12.7	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	14.1	9.5	12.7	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	14.2	9.9	13.1	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	14.3	9.5	12.7	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	15	10.3	13.5	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	15.1	10.3	13.5	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	15.2	10.7	13.9	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	15.3	10.3	13.5	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	16	11	14.2	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	16.1	11	14.2	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	16.2	11.4	14.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	16.3	11	14.2	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	17	11.8	15	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	17.1	11.8	15	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	17.2	12.2	15.4	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	17.3	11.8	15	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	18	12.6	15.8	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	18.1	12.6	15.8	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	18.2	13	16.2	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	18.3	12.6	15.8	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	19	13.4	16.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
	19.1	13.4	16.6	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
D19S433	19.2	13.7	16.9	2.9	2.9	2.4	3.3	4.5	4.5	1.4	1.4
TH01	3	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	3.1	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	3.2	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	3.3	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	4	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	4.1	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	4.2	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	4.3	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	5	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	5.1	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	5.2	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	5.3	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	6	3.6	6.4	0	0	0	0	1.2	1.2	1.2	1.2
	6.1	3.6	6.4	0	0	0	0	1.2	1.2	1.2	1.2
TH01	6.2	3.6	6.4	0	0	0	0	1.2	1.2	1.2	1.2
	6.3	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	7	4	6.8	0	0	0	0	1.2	1.2	1.2	1.2
	7.1	4	6.8	0	0	0	0	1.2	1.2	1.2	1.2
	7.2	4	6.8	0	0	0	0	1.2	1.2	1.2	1.2
	7.3	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	8	4.5	7.3	0	0	0	0	1.2	1.2	1.2	1.2
	8.1	4.5	7.3	0	0	0	0	1.2	1.2	1.2	1.2
	8.2	4.5	7.3	0	0	0	0	1.2	1.2	1.2	1.2
	8.3	3.1	5.9	0	0	0	0	1.2	1.2	1.2	1.2
	9	5	7.8	0	0	0	0	1.2	1.2	1.2	1.2
	9.1	5	7.8	0	0	0	0	1.2	1.2	1.2	1.2
	9.2	5	7.8	0	0	0	0	1.2	1.2	1.2	1.2
	9.3	3.6	6.4	0	0	0	0	1.2	1.2	1.2	1.2
	10	5.5	8.3	0	0	0	0	1.2	1.2	1.2	1.2
	10.1	5.5	8.3	0	0	0	0	1.2	1.2	1.2	1.2
	10.2	5.5	8.3	0	0	0	0	1.2	1.2	1.2	1.2
	10.3	4	6.8	0	0	0	0	1.2	1.2	1.2	1.2
	11	6	8.8	0	0	0	0	1.2	1.2	1.2	1.2
	11.1	6	8.8	0	0	0	0	1.2	1.2	1.2	1.2
	11.2	6	8.8	0	0	0	0	1.2	1.2	1.2	1.2
	11.3	4.5	7.3	0	0	0	0	1.2	1.2	1.2	1.2
	12	6.4	9.2	0	0	0	0	1.2	1.2	1.2	1.2
	12.1	6.4	9.2	0	0	0	0	1.2	1.2	1.2	1.2
	12.2	6.4	9.2	0	0	0	0	1.2	1.2	1.2	1.2
	12.3	5	7.8	0	0	0	0	1.2	1.2	1.2	1.2
	13	6.9	9.7	0	0	0	0	1.2	1.2	1.2	1.2
	13.1	6.9	9.7	0	0	0	0	1.2	1.2	1.2	1.2
	13.2	6.9	9.7	0	0	0	0	1.2	1.2	1.2	1.2
TH01	13.3	5.5	8.3	0	0	0	0	1.2	1.2	1.2	1.2

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
FGA	12.2	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	12.3	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	13	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	13.1	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	13.2	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	13.3	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	14	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	14.1	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	14.2	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	14.3	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	15	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	15.1	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	15.2	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	15.3	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	16	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	16.1	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	16.2	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	16.3	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	17	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	17.1	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	17.2	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	17.3	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	18	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	18.1	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
FGA	18.2	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	18.3	7	10	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	19	7.7	10.7	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	19.1	7.7	10.7	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	19.2	7.7	10.7	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	19.3	7.7	10.7	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	20	8.4	11.4	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	20.1	8.4	11.4	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	20.2	8.4	11.4	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	20.3	8.4	11.4	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	21	9.1	12.1	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	21.1	9.1	12.1	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	21.2	9.1	12.1	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	21.3	9.1	12.1	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	22	9.8	12.8	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	22.1	9.8	12.8	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	22.2	9.8	12.8	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	22.3	9.8	12.8	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	23	10.5	13.5	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	23.1	10.5	13.5	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	23.2	10.5	13.5	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	23.3	10.5	13.5	3.2	4.8	1.6	1.6	0	0	1.3	1.3

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	24	11.2	14.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	24.1	11.2	14.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	24.2	11.2	14.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	24.3	11.2	14.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	25	11.9	14.9	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	25.1	11.9	14.9	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	25.2	11.9	14.9	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	25.3	11.9	14.9	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	26	12.6	15.6	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	26.1	12.6	15.6	3.2	4.8	1.6	1.6	0	0	1.3	1.3
FGA	26.2	12.6	15.6	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	26.3	12.6	15.6	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	27	13.3	16.3	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	27.1	13.3	16.3	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	27.2	13.3	16.3	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	27.3	13.3	16.3	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	28	14	17	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	28.1	14	17	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	28.2	14	17	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	28.3	14	17	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	29	14.7	17.7	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	29.1	14.7	17.7	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	29.2	14.7	17.7	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	29.3	14.7	17.7	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	30	15.4	18.4	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	30.1	15.4	18.4	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	30.2	15.4	18.4	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	30.3	15.4	18.4	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	31	16.1	19.1	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	31.1	16.1	19.1	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	31.2	16.1	19.1	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	31.3	16.1	19.1	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	32	16.8	19.8	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	32.1	16.8	19.8	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	32.2	16.8	19.8	3.2	4.8	1.6	1.6	0	0	1.3	1.3
FGA	32.3	16.8	19.8	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	33	17.5	20.5	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	33.1	17.5	20.5	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	33.2	17.5	20.5	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	33.3	17.5	20.5	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	34	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	34.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	34.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
FGA	41.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	41.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	42	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	42.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	42.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	42.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	43	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	43.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	43.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	43.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	44	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	44.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	44.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	44.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	45	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	45.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	45.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	45.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	46	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	46.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	46.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	46.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	47	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	47.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	47.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	47.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	48	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	48.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	48.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	48.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	49	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	49.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	49.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	49.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	50	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	50.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	50.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	50.3	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	51	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
	51.1	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
FGA	51.2	18.2	21.2	3.2	4.8	1.6	1.6	0	0	1.3	1.3
D22S1045	7	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	7.1	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	7.2	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	8	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	8.1	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	8.2	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	9	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	9.1	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	9.2	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	10	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	10.1	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0
	10.2	4.9	9.5	3.7	5.8	2.1	2.1	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	11	6.2	10.8	4.3	6.4	2.1	2.1	0	0	0	0
	11.1	6.2	10.8	4.3	6.4	2.1	2.1	0	0	0	0
	11.2	6.2	10.8	4.3	6.4	2.1	2.1	0	0	0	0
	12	7.5	12.1	4.9	7	2.1	2.1	0	0	0	0
	12.1	7.5	12.1	4.9	7	2.1	2.1	0	0	0	0
	12.2	7.5	12.1	4.9	7	2.1	2.1	0	0	0	0
D22S1045	13	8.8	13.4	5.5	7.6	2.1	2.1	0	0	0	0
	13.1	8.8	13.4	5.5	7.6	2.1	2.1	0	0	0	0
	13.2	8.8	13.4	5.5	7.6	2.1	2.1	0	0	0	0
	14	10.1	14.7	6.2	8.3	2.1	2.1	0	0	0	0
	14.1	10.1	14.7	6.2	8.3	2.1	2.1	0	0	0	0
	14.2	10.1	14.7	6.2	8.3	2.1	2.1	0	0	0	0
	15	11.4	16	6.8	8.9	2.1	2.1	0	0	0	0
	15.1	11.4	16	6.8	8.9	2.1	2.1	0	0	0	0
	15.2	11.4	16	6.8	8.9	2.1	2.1	0	0	0	0
	16	12.6	17.2	7.4	9.5	2.1	2.1	0	0	0	0
	16.1	12.6	17.2	7.4	9.5	2.1	2.1	0	0	0	0
	16.2	12.6	17.2	7.4	9.5	2.1	2.1	0	0	0	0
	17	13.9	18.5	8.1	10.2	2.1	2.1	0	0	0	0
	17.1	13.9	18.5	8.1	10.2	2.1	2.1	0	0	0	0
	17.2	13.9	18.5	8.1	10.2	2.1	2.1	0	0	0	0
	18	15.2	19.8	8.7	10.8	2.1	2.1	0	0	0	0
	18.1	15.2	19.8	8.7	10.8	2.1	2.1	0	0	0	0
	18.2	15.2	19.8	8.7	10.8	2.1	2.1	0	0	0	0
	19	16.5	21.1	9.3	11.4	2.1	2.1	0	0	0	0
	19.1	16.5	21.1	9.3	11.4	2.1	2.1	0	0	0	0
	19.2	16.5	21.1	9.3	11.4	2.1	2.1	0	0	0	0
D22S1045	20	17.8	22.4	10	12.1	2.1	2.1	0	0	0	0
D5S818	6	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	6.1	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	6.2	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	6.3	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	7	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	7.1	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	7.2	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	7.3	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	8	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	8.1	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	8.2	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	8.3	6.3	10.3	3.5	6.8	2.4	2.4	0	0	0	0
	9	6.9	10.9	3.5	6.8	2.4	2.4	0	0	0	0
	9.1	6.9	10.9	3.5	6.8	2.4	2.4	0	0	0	0
D5S818	9.2	6.9	10.9	3.5	6.8	2.4	2.4	0	0	0	0
	9.3	6.9	10.9	3.5	6.8	2.4	2.4	0	0	0	0
	10	7.6	11.6	3.5	6.8	2.4	2.4	0	0	0	0
	10.1	7.6	11.6	3.5	6.8	2.4	2.4	0	0	0	0
	10.2	7.6	11.6	3.5	6.8	2.4	2.4	0	0	0	0
	10.3	7.6	11.6	3.5	6.8	2.4	2.4	0	0	0	0
	11	8.3	12.3	3.5	6.8	2.4	2.4	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	11.1	8.3	12.3	3.5	6.8	2.4	2.4	0	0	0	0
	11.2	8.3	12.3	3.5	6.8	2.4	2.4	0	0	0	0
	11.3	8.3	12.3	3.5	6.8	2.4	2.4	0	0	0	0
	12	9	13	3.5	6.8	2.4	2.4	0	0	0	0
	12.1	9	13	3.5	6.8	2.4	2.4	0	0	0	0
	12.2	9	13	3.5	6.8	2.4	2.4	0	0	0	0
	12.3	9	13	3.5	6.8	2.4	2.4	0	0	0	0
	13	9.7	13.7	3.5	6.8	2.4	2.4	0	0	0	0
	13.1	9.7	13.7	3.5	6.8	2.4	2.4	0	0	0	0
	13.2	9.7	13.7	3.5	6.8	2.4	2.4	0	0	0	0
	13.3	9.7	13.7	3.5	6.8	2.4	2.4	0	0	0	0
	14	10.4	14.4	3.5	6.8	2.4	2.4	0	0	0	0
	14.1	10.4	14.4	3.5	6.8	2.4	2.4	0	0	0	0
	14.2	10.4	14.4	3.5	6.8	2.4	2.4	0	0	0	0
	14.3	10.4	14.4	3.5	6.8	2.4	2.4	0	0	0	0
	15	11.1	15.1	3.5	6.8	2.4	2.4	0	0	0	0
	15.1	11.1	15.1	3.5	6.8	2.4	2.4	0	0	0	0
	15.2	11.1	15.1	3.5	6.8	2.4	2.4	0	0	0	0
	15.3	11.1	15.1	3.5	6.8	2.4	2.4	0	0	0	0
	16	11.8	15.8	3.5	6.8	2.4	2.4	0	0	0	0
	16.1	11.8	15.8	3.5	6.8	2.4	2.4	0	0	0	0
	16.2	11.8	15.8	3.5	6.8	2.4	2.4	0	0	0	0
	16.3	11.8	15.8	3.5	6.8	2.4	2.4	0	0	0	0
	17	12.5	16.5	3.5	6.8	2.4	2.4	0	0	0	0
	17.1	12.5	16.5	3.5	6.8	2.4	2.4	0	0	0	0
	17.2	12.5	16.5	3.5	6.8	2.4	2.4	0	0	0	0
	17.3	12.5	16.5	3.5	6.8	2.4	2.4	0	0	0	0
	18	13.2	17.2	3.5	6.8	2.4	2.4	0	0	0	0
	18.1	13.2	17.2	3.5	6.8	2.4	2.4	0	0	0	0
	18.2	13.2	17.2	3.5	6.8	2.4	2.4	0	0	0	0
	18.3	13.2	17.2	3.5	6.8	2.4	2.4	0	0	0	0
D5S818	19	13.8	17.8	3.5	6.8	2.4	2.4	0	0	0	0
D13S317	5	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	5.1	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	5.2	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	5.3	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	6	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	6.1	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	6.2	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	6.3	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	7	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	7.1	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	7.2	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	7.3	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	8	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	8.1	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	8.2	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D13S317	8.3	5.3	9.4	2.9	4.3	2.1	2.1	0	0	0	0
	9	6.1	10.2	2.9	4.3	2.1	2.1	0	0	0	0
	9.1	6.1	10.2	2.9	4.3	2.1	2.1	0	0	0	0
	9.2	6.1	10.2	2.9	4.3	2.1	2.1	0	0	0	0
	9.3	6.1	10.2	2.9	4.3	2.1	2.1	0	0	0	0
	10	7	11.1	2.9	4.3	2.1	2.1	0	0	0	0
	10.1	7	11.1	2.9	4.3	2.1	2.1	0	0	0	0
	10.2	7	11.1	2.9	4.3	2.1	2.1	0	0	0	0
	10.3	7	11.1	2.9	4.3	2.1	2.1	0	0	0	0
	11	7.8	11.9	2.9	4.3	2.1	2.1	0	0	0	0
	11.1	7.8	11.9	2.9	4.3	2.1	2.1	0	0	0	0
	11.2	7.8	11.9	2.9	4.3	2.1	2.1	0	0	0	0
	11.3	7.8	11.9	2.9	4.3	2.1	2.1	0	0	0	0
	12	8.7	12.8	2.9	4.3	2.1	2.1	0	0	0	0
	12.1	8.7	12.8	2.9	4.3	2.1	2.1	0	0	0	0
	12.2	8.7	12.8	2.9	4.3	2.1	2.1	0	0	0	0
	12.3	8.7	12.8	2.9	4.3	2.1	2.1	0	0	0	0
	13	9.6	13.7	2.9	4.3	2.1	2.1	0	0	0	0
	13.1	9.6	13.7	2.9	4.3	2.1	2.1	0	0	0	0
	13.2	9.6	13.7	2.9	4.3	2.1	2.1	0	0	0	0
	13.3	9.6	13.7	2.9	4.3	2.1	2.1	0	0	0	0
	14	10.4	14.5	2.9	4.3	2.1	2.1	0	0	0	0
	14.1	10.4	14.5	2.9	4.3	2.1	2.1	0	0	0	0
	14.2	10.4	14.5	2.9	4.3	2.1	2.1	0	0	0	0
	14.3	10.4	14.5	2.9	4.3	2.1	2.1	0	0	0	0
	15	11.3	15.4	2.9	4.3	2.1	2.1	0	0	0	0
	15.1	11.3	15.4	2.9	4.3	2.1	2.1	0	0	0	0
	15.2	11.3	15.4	2.9	4.3	2.1	2.1	0	0	0	0
	15.3	11.3	15.4	2.9	4.3	2.1	2.1	0	0	0	0
	16	12.1	16.2	2.9	4.3	2.1	2.1	0	0	0	0
	16.1	12.1	16.2	2.9	4.3	2.1	2.1	0	0	0	0
	16.2	12.1	16.2	2.9	4.3	2.1	2.1	0	0	0	0
	16.3	12.1	16.2	2.9	4.3	2.1	2.1	0	0	0	0
D13S317	17	13	17.1	2.9	4.3	2.1	2.1	0	0	0	0
D7S820	5	5	7.3	2.1	6.5	2.5	2.5	0	0	0	0
	5.1	5	7.3	2.1	6.5	2.5	2.5	0	0	0	0
	5.2	5	7.3	2.1	6.5	2.5	2.5	0	0	0	0
	5.3	5	7.3	2.1	6.5	2.5	2.5	0	0	0	0
	6	5	7.3	2.1	6.5	2.5	2.5	0	0	0	0
	6.1	5	7.3	2.1	6.5	2.5	2.5	0	0	0	0
	6.2	5	7.3	2.1	6.5	2.5	2.5	0	0	0	0
	6.3	5	7.3	2.1	6.5	2.5	2.5	0	0	0	0
	7	5.8	8.1	2.1	6.5	2.5	2.5	0	0	0	0
	7.1	5.8	8.1	2.1	6.5	2.5	2.5	0	0	0	0
	7.2	5.8	8.1	2.1	6.5	2.5	2.5	0	0	0	0
	7.3	5.8	8.1	2.1	6.5	2.5	2.5	0	0	0	0
	8	6.6	8.9	2.1	6.5	2.5	2.5	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	8.1	6.6	8.9	2.1	6.5	2.5	2.5	0	0	0	0
	8.2	6.6	8.9	2.1	6.5	2.5	2.5	0	0	0	0
	8.3	6.6	8.9	2.1	6.5	2.5	2.5	0	0	0	0
	9	7.5	9.8	2.1	6.5	2.5	2.5	0	0	0	0
	9.1	7.5	9.8	2.1	6.5	2.5	2.5	0	0	0	0
	9.2	7.5	9.8	2.1	6.5	2.5	2.5	0	0	0	0
	9.3	7.5	9.8	2.1	6.5	2.5	2.5	0	0	0	0
	10	8.3	10.6	2.1	6.5	2.5	2.5	0	0	0	0
	10.1	8.3	10.6	2.1	6.5	2.5	2.5	0	0	0	0
	10.2	8.3	10.6	2.1	6.5	2.5	2.5	0	0	0	0
	10.3	8.3	10.6	2.1	6.5	2.5	2.5	0	0	0	0
D7S820	11	9.1	11.4	2.1	6.5	2.5	2.5	0	0	0	0
	11.1	9.1	11.4	2.1	6.5	2.5	2.5	0	0	0	0
	11.2	9.1	11.4	2.1	6.5	2.5	2.5	0	0	0	0
	11.3	9.1	11.4	2.1	6.5	2.5	2.5	0	0	0	0
	12	10	12.3	2.1	6.5	2.5	2.5	0	0	0	0
	12.1	10	12.3	2.1	6.5	2.5	2.5	0	0	0	0
	12.2	10	12.3	2.1	6.5	2.5	2.5	0	0	0	0
	12.3	10	12.3	2.1	6.5	2.5	2.5	0	0	0	0
	13	10.8	13.1	2.1	6.5	2.5	2.5	0	0	0	0
	13.1	10.8	13.1	2.1	6.5	2.5	2.5	0	0	0	0
	13.2	10.8	13.1	2.1	6.5	2.5	2.5	0	0	0	0
	13.3	10.8	13.1	2.1	6.5	2.5	2.5	0	0	0	0
	14	11.6	13.9	2.1	6.5	2.5	2.5	0	0	0	0
	14.1	11.6	13.9	2.1	6.5	2.5	2.5	0	0	0	0
	14.2	11.6	13.9	2.1	6.5	2.5	2.5	0	0	0	0
	14.3	11.6	13.9	2.1	6.5	2.5	2.5	0	0	0	0
	15	12.5	14.8	2.1	6.5	2.5	2.5	0	0	0	0
	15.1	12.5	14.8	2.1	6.5	2.5	2.5	0	0	0	0
	15.2	12.5	14.8	2.1	6.5	2.5	2.5	0	0	0	0
	15.3	12.5	14.8	2.1	6.5	2.5	2.5	0	0	0	0
D7S820	16	13.3	15.6	2.1	6.5	2.5	2.5	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
SE33	4.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	4.3	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	5	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	5.1	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	5.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	5.3	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	6	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	6.1	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	6.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	6.3	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	7	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	7.1	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	7.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	7.3	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	8	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	8.1	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	8.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	8.3	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	9	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	9.1	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	9.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	9.3	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	10	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	10.1	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	10.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	10.3	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	11	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	11.1	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	11.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
SE33	11.3	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	12	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	12.1	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	12.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	12.3	9.4	14.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	13	10	15	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	13.1	10	15	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	13.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	13.3	10	15	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	14	10.6	15.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	14.1	10.6	15.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	14.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	14.3	10.6	15.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	15	11.2	16.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	15.1	11.2	16.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	15.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	15.3	11.2	16.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	16	11.9	16.9	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	16.1	11.9	16.9	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	16.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	16.3	11.9	16.9	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	17	12.5	17.5	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	17.1	12.5	17.5	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	17.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	17.3	12.5	17.5	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	18	13.1	18.1	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	18.1	13.1	18.1	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	18.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	18.3	13.1	18.1	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	19	13.7	18.7	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	19.1	13.7	18.7	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	19.2	10.8	15.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	19.3	13.7	18.7	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
SE33	20	14.3	19.3	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	20.1	14.3	19.3	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	20.2	11.4	16.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	20.3	14.3	19.3	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	21	14.9	19.9	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	21.1	14.9	19.9	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	21.2	12	17	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	21.3	14.9	19.9	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	22	15.5	20.5	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	22.1	15.5	20.5	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	22.2	12.5	17.5	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	22.3	15.5	20.5	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	23	16.1	21.1	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	23.1	16.1	21.1	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	23.2	13.1	18.1	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	23.3	16.1	21.1	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	24	16.7	21.7	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	24.1	16.7	21.7	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	24.2	13.7	18.7	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	24.3	16.7	21.7	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	25	17.3	22.3	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	25.1	17.3	22.3	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	25.2	14.3	19.3	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	25.3	17.3	22.3	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
SE33	26	18	23	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	26.1	18	23	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	26.2	14.9	19.9	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	26.3	18	23	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	27	18.6	23.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	27.1	18.6	23.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	27.2	15.4	20.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	27.3	18.6	23.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	28	19.2	24.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	28.1	19.2	24.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	28.2	16	21	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	28.3	19.2	24.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	29	19.8	24.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	29.1	19.8	24.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	29.2	16.6	21.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	29.3	19.8	24.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	30	20.4	25.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	30.1	20.4	25.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	30.2	17.2	22.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	30.3	20.4	25.4	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	31	21	26	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	31.1	21	26	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	31.2	17.8	22.8	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	31.3	21	26	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	32	21.6	26.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	32.1	21.6	26.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	32.2	18.3	23.3	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	32.3	21.6	26.6	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	33	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	33.1	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	33.2	18.9	23.9	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	33.3	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	34	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	34.1	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	34.2	19.5	24.5	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	34.3	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	35	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	35.1	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	35.2	20.1	25.1	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	35.3	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	36	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	36.1	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	36.2	20.7	25.7	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	36.3	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	37	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	37.1	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	37.2	21.2	26.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
	37.3	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3
SE33	38	22.2	27.2	5.6	11.7	3.1	3.1	7	11.9	2.3	5.3

D10S1248	7	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	7.1	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	7.2	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	7.3	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	8	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	8.1	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	8.2	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	8.3	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	9	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	9.1	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	9.2	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	9.3	7.7	11.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	10	8.4	12.6	2.7	2.7	2	2.9	1.1	2.5	0	0
	10.1	8.4	12.6	2.7	2.7	2	2.9	1.1	2.5	0	0
	10.2	8.4	12.6	2.7	2.7	2	2.9	1.1	2.5	0	0
	10.3	8.4	12.6	2.7	2.7	2	2.9	1.1	2.5	0	0
	11	9	13.2	2.7	2.7	2	2.9	1.1	2.5	0	0
	11.1	9	13.2	2.7	2.7	2	2.9	1.1	2.5	0	0
	11.2	9	13.2	2.7	2.7	2	2.9	1.1	2.5	0	0
	11.3	9	13.2	2.7	2.7	2	2.9	1.1	2.5	0	0
	12	9.7	13.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	12.1	9.7	13.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	12.2	9.7	13.9	2.7	2.7	2	2.9	1.1	2.5	0	0
	12.3	9.7	13.9	2.7	2.7	2	2.9	1.1	2.5	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D10S1248	13	10.3	14.5	2.7	2.7	2	2.9	1.1	2.5	0	0
	13.1	10.3	14.5	2.7	2.7	2	2.9	1.1	2.5	0	0
	13.2	10.3	14.5	2.7	2.7	2	2.9	1.1	2.5	0	0
	13.3	10.3	14.5	2.7	2.7	2	2.9	1.1	2.5	0	0
	14	11	15.2	2.7	2.7	2	2.9	1.1	2.5	0	0
	14.1	11	15.2	2.7	2.7	2	2.9	1.1	2.5	0	0
	14.2	11	15.2	2.7	2.7	2	2.9	1.1	2.5	0	0
	14.3	11	15.2	2.7	2.7	2	2.9	1.1	2.5	0	0
	15	11.6	15.8	2.7	2.7	2	2.9	1.1	2.5	0	0
	15.1	11.6	15.8	2.7	2.7	2	2.9	1.1	2.5	0	0
	15.2	11.6	15.8	2.7	2.7	2	2.9	1.1	2.5	0	0
	15.3	11.6	15.8	2.7	2.7	2	2.9	1.1	2.5	0	0
	16	12.3	16.5	2.7	2.7	2	2.9	1.1	2.5	0	0
	16.1	12.3	16.5	2.7	2.7	2	2.9	1.1	2.5	0	0
	16.2	12.3	16.5	2.7	2.7	2	2.9	1.1	2.5	0	0
	16.3	12.3	16.5	2.7	2.7	2	2.9	1.1	2.5	0	0
	17	12.9	17.1	2.7	2.7	2	2.9	1.1	2.5	0	0
	17.1	12.9	17.1	2.7	2.7	2	2.9	1.1	2.5	0	0
	17.2	12.9	17.1	2.7	2.7	2	2.9	1.1	2.5	0	0
	17.3	12.9	17.1	2.7	2.7	2	2.9	1.1	2.5	0	0
	18	13.6	17.8	2.7	2.7	2	2.9	1.1	2.5	0	0
D10S1248	18.1	13.6	17.8	2.7	2.7	2	2.9	1.1	2.5	0	0
	18.2	13.6	17.8	2.7	2.7	2	2.9	1.1	2.5	0	0
D1S1656	18.3	13.6	17.8	2.7	2.7	2	2.9	1.1	2.5	0	0
	19	14.2	18.4	2.7	2.7	2	2.9	1.1	2.5	0	0
	8	8.3	11.5	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	8.1	8.3	11.5	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	8.2	8.3	11.5	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	8.3	8.2	11.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	9	8.3	11.5	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	9.1	8.3	11.5	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	9.2	8.3	11.5	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	9.3	8.2	11.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	10	9.1	12.3	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	10.1	9.1	12.3	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	10.2	9.1	12.3	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	10.3	8.2	11.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	11	10	13.2	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	11.1	10	13.2	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	11.2	10	13.2	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	11.3	8.2	11.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	12	10.8	14	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	12.1	10.8	14	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	12.2	10.8	14	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	12.3	8.2	11.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	13	11.7	14.9	2.9	4.6	2.2	4.5	4.1	9.3	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	13.1	11.7	14.9	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	13.2	11.7	14.9	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	13.3	8.2	11.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	14	12.5	15.7	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	14.1	12.5	15.7	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	14.2	12.5	15.7	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	14.3	8.2	11.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	15	13.3	16.5	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	15.1	13.3	16.5	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	15.2	13.3	16.5	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	15.3	9	12.2	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	16	14.2	17.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	16.1	14.2	17.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	16.2	14.2	17.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	16.3	9.7	12.9	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	17	15	18.2	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	17.1	15	18.2	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	17.2	15	18.2	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	17.3	10.5	13.7	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	18	15.9	19.1	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	18.1	15.9	19.1	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	18.2	15.9	19.1	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	18.3	11.2	14.4	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	19	16.7	19.9	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	19.1	16.7	19.9	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	19.2	16.7	19.9	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	19.3	11.9	15.1	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	20	17.5	20.7	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	20.1	17.5	20.7	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	20.2	17.5	20.7	2.9	4.6	2.2	4.5	4.1	9.3	0	0
	20.3	12.7	15.9	2.9	4.6	2.2	4.5	4.1	9.3	0	0
D1S1656	21	18.4	21.6	2.9	4.6	2.2	4.5	4.1	9.3	0	0

D12S391	13	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	13.1	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	13.2	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	13.3	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	14	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	14.1	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	14.2	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	14.3	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	15	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	15.1	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	15.2	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	15.3	9.2	14.4	3.7	3.7	2	2	0	0	0	0
	16	10	15.2	3.7	3.7	2	2	0	0	0	0
	16.1	10	15.2	3.7	3.7	2	2	0	0	0	0
	16.2	10	15.2	3.7	3.7	2	2	0	0	0	0
	16.3	10	15.2	3.7	3.7	2	2	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	17	10.8	16	3.7	3.7	2	2	0	0	0	0
	17.1	10.8	16	3.7	3.7	2	2	0	0	0	0
	17.2	10.8	16	3.7	3.7	2	2	0	0	0	0
	17.3	10.8	16	3.7	3.7	2	2	0	0	0	0
	18	11.6	16.8	3.7	3.7	2	2	0	0	0	0
	18.1	11.6	16.8	3.7	3.7	2	2	0	0	0	0
	18.2	11.6	16.8	3.7	3.7	2	2	0	0	0	0
	18.3	11.6	16.8	3.7	3.7	2	2	0	0	0	0
	19	12.4	17.6	3.7	3.7	2	2	0	0	0	0
	19.1	12.4	17.6	3.7	3.7	2	2	0	0	0	0
	19.2	12.4	17.6	3.7	3.7	2	2	0	0	0	0
	19.3	12.4	17.6	3.7	3.7	2	2	0	0	0	0
	20	13.2	18.4	3.7	3.7	2	2	0	0	0	0
	20.1	13.2	18.4	3.7	3.7	2	2	0	0	0	0
	20.2	13.2	18.4	3.7	3.7	2	2	0	0	0	0
	20.3	13.2	18.4	3.7	3.7	2	2	0	0	0	0
	21	14	19.2	3.7	3.7	2	2	0	0	0	0
	21.1	14	19.2	3.7	3.7	2	2	0	0	0	0
	21.2	14	19.2	3.7	3.7	2	2	0	0	0	0
	21.3	14	19.2	3.7	3.7	2	2	0	0	0	0
	22	14.8	20	3.7	3.7	2	2	0	0	0	0
	22.1	14.8	20	3.7	3.7	2	2	0	0	0	0
	22.2	14.8	20	3.7	3.7	2	2	0	0	0	0
	22.3	14.8	20	3.7	3.7	2	2	0	0	0	0
	23	15.7	20.9	3.7	3.7	2	2	0	0	0	0
	23.1	15.7	20.9	3.7	3.7	2	2	0	0	0	0
	23.2	15.7	20.9	3.7	3.7	2	2	0	0	0	0
	23.3	15.7	20.9	3.7	3.7	2	2	0	0	0	0
	24	16.5	21.7	3.7	3.7	2	2	0	0	0	0
	24.1	16.5	21.7	3.7	3.7	2	2	0	0	0	0
	24.2	16.5	21.7	3.7	3.7	2	2	0	0	0	0
	24.3	16.5	21.7	3.7	3.7	2	2	0	0	0	0
	25	17.3	22.5	3.7	3.7	2	2	0	0	0	0
	25.1	17.3	22.5	3.7	3.7	2	2	0	0	0	0
	25.2	17.3	22.5	3.7	3.7	2	2	0	0	0	0
	25.3	17.3	22.5	3.7	3.7	2	2	0	0	0	0
	26	18.1	23.3	3.7	3.7	2	2	0	0	0	0
	26.1	18.1	23.3	3.7	3.7	2	2	0	0	0	0
	26.2	18.1	23.3	3.7	3.7	2	2	0	0	0	0
	26.3	18.1	23.3	3.7	3.7	2	2	0	0	0	0
D12S391	27	18.9	24.1	3.7	3.7	2	2	0	0	0	0
D2S1338	10	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	10.1	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	10.2	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	10.3	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	11	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	11.1	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	11.2	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	11.3	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	12	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	12.1	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	12.2	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	12.3	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	13	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	13.1	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	13.2	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	13.3	6.4	10.6	3.4	3.4	1.7	3.6	0	0	0	0
	14	7.1	11.3	3.4	3.4	1.7	3.6	0	0	0	0
	14.1	7.1	11.3	3.4	3.4	1.7	3.6	0	0	0	0
	14.2	7.1	11.3	3.4	3.4	1.7	3.6	0	0	0	0
	14.3	7.1	11.3	3.4	3.4	1.7	3.6	0	0	0	0
	15	7.9	12.1	3.4	3.4	1.7	3.6	0	0	0	0
	15.1	7.9	12.1	3.4	3.4	1.7	3.6	0	0	0	0
	15.2	7.9	12.1	3.4	3.4	1.7	3.6	0	0	0	0
	15.3	7.9	12.1	3.4	3.4	1.7	3.6	0	0	0	0
	16	8.6	12.8	3.4	3.4	1.7	3.6	0	0	0	0
	16.1	8.6	12.8	3.4	3.4	1.7	3.6	0	0	0	0
	16.2	8.6	12.8	3.4	3.4	1.7	3.6	0	0	0	0
	16.3	8.6	12.8	3.4	3.4	1.7	3.6	0	0	0	0
	17	9.3	13.5	3.4	3.4	1.7	3.6	0	0	0	0
	17.1	9.3	13.5	3.4	3.4	1.7	3.6	0	0	0	0
	17.2	9.3	13.5	3.4	3.4	1.7	3.6	0	0	0	0
	17.3	9.3	13.5	3.4	3.4	1.7	3.6	0	0	0	0
	18	10	14.2	3.4	3.4	1.7	3.6	0	0	0	0
	18.1	10	14.2	3.4	3.4	1.7	3.6	0	0	0	0
	18.2	10	14.2	3.4	3.4	1.7	3.6	0	0	0	0
	18.3	10	14.2	3.4	3.4	1.7	3.6	0	0	0	0
	19	10.8	15	3.4	3.4	1.7	3.6	0	0	0	0
	19.1	10.8	15	3.4	3.4	1.7	3.6	0	0	0	0
D2S1338	19.2	10.8	15	3.4	3.4	1.7	3.6	0	0	0	0
	19.3	10.8	15	3.4	3.4	1.7	3.6	0	0	0	0
	20	11.5	15.7	3.4	3.4	1.7	3.6	0	0	0	0
	20.1	11.5	15.7	3.4	3.4	1.7	3.6	0	0	0	0
	20.2	11.5	15.7	3.4	3.4	1.7	3.6	0	0	0	0
	20.3	11.5	15.7	3.4	3.4	1.7	3.6	0	0	0	0
	21	12.2	16.4	3.4	3.4	1.7	3.6	0	0	0	0
	21.1	12.2	16.4	3.4	3.4	1.7	3.6	0	0	0	0
	21.2	12.2	16.4	3.4	3.4	1.7	3.6	0	0	0	0
	21.3	12.2	16.4	3.4	3.4	1.7	3.6	0	0	0	0
	22	13	17.2	3.4	3.4	1.7	3.6	0	0	0	0
	22.1	13	17.2	3.4	3.4	1.7	3.6	0	0	0	0
	22.2	13	17.2	3.4	3.4	1.7	3.6	0	0	0	0
	22.3	13	17.2	3.4	3.4	1.7	3.6	0	0	0	0
	23	13.7	17.9	3.4	3.4	1.7	3.6	0	0	0	0
	23.1	13.7	17.9	3.4	3.4	1.7	3.6	0	0	0	0
	23.2	13.7	17.9	3.4	3.4	1.7	3.6	0	0	0	0
	23.3	13.7	17.9	3.4	3.4	1.7	3.6	0	0	0	0
	24	14.4	18.6	3.4	3.4	1.7	3.6	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
D2S1338	24.1	14.4	18.6	3.4	3.4	1.7	3.6	0	0	0	0
	24.2	14.4	18.6	3.4	3.4	1.7	3.6	0	0	0	0
	24.3	14.4	18.6	3.4	3.4	1.7	3.6	0	0	0	0
	25	15.2	19.4	3.4	3.4	1.7	3.6	0	0	0	0
	25.1	15.2	19.4	3.4	3.4	1.7	3.6	0	0	0	0
	25.2	15.2	19.4	3.4	3.4	1.7	3.6	0	0	0	0
	25.3	15.2	19.4	3.4	3.4	1.7	3.6	0	0	0	0
	26	15.9	20.1	3.4	3.4	1.7	3.6	0	0	0	0
	26.1	15.9	20.1	3.4	3.4	1.7	3.6	0	0	0	0
	26.2	15.9	20.1	3.4	3.4	1.7	3.6	0	0	0	0
	26.3	15.9	20.1	3.4	3.4	1.7	3.6	0	0	0	0
	27	16.6	20.8	3.4	3.4	1.7	3.6	0	0	0	0
	27.1	16.6	20.8	3.4	3.4	1.7	3.6	0	0	0	0
	27.2	16.6	20.8	3.4	3.4	1.7	3.6	0	0	0	0
	27.3	16.6	20.8	3.4	3.4	1.7	3.6	0	0	0	0
	28	17.3	21.5	3.4	3.4	1.7	3.6	0	0	0	0
	28.1	17.3	21.5	3.4	3.4	1.7	3.6	0	0	0	0
	28.2	17.3	21.5	3.4	3.4	1.7	3.6	0	0	0	0
	28.3	17.3	21.5	3.4	3.4	1.7	3.6	0	0	0	0
D2S1338	29	18.1	22.3	3.4	3.4	1.7	3.6	0	0	0	0

41.1.2 Yfiler Plus

Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
DYS576	9	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	9.1	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	9.2	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	9.3	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	10	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	10.1	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	10.2	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	10.3	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	11	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	11.1	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	11.2	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	11.3	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	12	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	12.1	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	12.2	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	12.3	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	13	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	13.1	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	13.2	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0
	13.3	9.4	12	3.3	3.7	1.2	2.1	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	14	10.3	12.9	3.3	3.7	1.2	2.1	0	0	0	0
	14.1	10.3	12.9	3.3	3.7	1.2	2.1	0	0	0	0
	14.2	10.3	12.9	3.3	3.7	1.2	2.1	0	0	0	0
	14.3	10.3	12.9	3.3	3.7	1.2	2.1	0	0	0	0
	15	11.2	13.8	3.3	3.7	1.3	2.2	0	0	0	0
	15.1	11.2	13.8	3.3	3.7	1.3	2.2	0	0	0	0
	15.2	11.2	13.8	3.3	3.7	1.3	2.2	0	0	0	0
	15.3	11.2	13.8	3.3	3.7	1.3	2.2	0	0	0	0
	16	12.2	14.7	3.3	3.7	1.5	2.3	0	0	0	0
	16.1	12.2	14.7	3.3	3.7	1.5	2.3	0	0	0	0
	16.2	12.2	14.7	3.3	3.7	1.5	2.3	0	0	0	0
	16.3	12.2	14.7	3.3	3.7	1.5	2.3	0	0	0	0
	17	13.1	15.6	3.3	3.7	1.6	2.4	0	0	0	0
	17.1	13.1	15.6	3.3	3.7	1.6	2.4	0	0	0	0
	17.2	13.1	15.6	3.3	3.7	1.6	2.4	0	0	0	0
	17.3	13.1	15.6	3.3	3.7	1.6	2.4	0	0	0	0
DYS576	18	14	16.6	3.3	3.7	1.7	2.6	0	0	0	0
	18.1	14	16.6	3.3	3.7	1.7	2.6	0	0	0	0
	18.2	14	16.6	3.3	3.7	1.7	2.6	0	0	0	0
	18.3	14	16.6	3.3	3.7	1.7	2.6	0	0	0	0
	19	14.9	17.5	3.3	3.7	1.9	2.7	0	0	0	0
	19.1	14.9	17.5	3.3	3.7	1.9	2.7	0	0	0	0
	19.2	14.9	17.5	3.3	3.7	1.9	2.7	0	0	0	0
	19.3	14.9	17.5	3.3	3.7	1.9	2.7	0	0	0	0
	20	15.8	18.4	3.3	3.7	2	2.8	0	0	0	0
	20.1	15.8	18.4	3.3	3.7	2	2.8	0	0	0	0
	20.2	15.8	18.4	3.3	3.7	2	2.8	0	0	0	0
	20.3	15.8	18.4	3.3	3.7	2	2.8	0	0	0	0
	21	16.8	19.3	3.3	3.7	2.1	3	0	0	0	0
	21.1	16.8	19.3	3.3	3.7	2.1	3	0	0	0	0
	21.2	16.8	19.3	3.3	3.7	2.1	3	0	0	0	0
	21.3	16.8	19.3	3.3	3.7	2.1	3	0	0	0	0
	22	17.7	20.2	3.3	3.7	2.3	3.1	0	0	0	0
	22.1	17.7	20.2	3.3	3.7	2.3	3.1	0	0	0	0
	22.2	17.7	20.2	3.3	3.7	2.3	3.1	0	0	0	0
	22.3	17.7	20.2	3.3	3.7	2.3	3.1	0	0	0	0
	23	18.6	21.2	3.3	3.7	2.4	3.2	0	0	0	0
DYS576	23.1	18.6	21.2	3.3	3.7	2.4	3.2	0	0	0	0
	23.2	18.6	21.2	3.3	3.7	2.4	3.2	0	0	0	0
	23.3	18.6	21.2	3.3	3.7	2.4	3.2	0	0	0	0
	24	19.5	22.1	3.3	3.7	2.5	3.4	0	0	0	0
	24.1	19.5	22.1	3.3	3.7	2.5	3.4	0	0	0	0
	24.2	19.5	22.1	3.3	3.7	2.5	3.4	0	0	0	0
	24.3	19.5	22.1	3.3	3.7	2.5	3.4	0	0	0	0
	25	20.4	23	3.3	3.7	2.6	3.5	0	0	0	0
	25.1	20.4	23	3.3	3.7	2.6	3.5	0	0	0	0
	25.2	20.4	23	3.3	3.7	2.6	3.5	0	0	0	0
	25.3	20.4	23	3.3	3.7	2.6	3.5	0	0	0	0
DYS576	26	21.4	23.9	3.3	3.7	2.8	3.6	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
DYS389I	8	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	8.1	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	8.2	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	8.3	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	9	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	9.1	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	9.2	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	9.3	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	10	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	10.1	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	10.2	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	10.3	4.2	7.1	2.3	2.3	1.1	1.1	0	0	0	0
	11	5.5	8.4	2.3	2.3	1.1	1.1	0	0	0	0
	11.1	5.5	8.4	2.3	2.3	1.1	1.1	0	0	0	0
	11.2	5.5	8.4	2.3	2.3	1.1	1.1	0	0	0	0
	11.3	5.5	8.4	2.3	2.3	1.1	1.1	0	0	0	0
	12	6.8	9.7	2.3	2.3	1.1	1.1	0	0	0	0
	12.1	6.8	9.7	2.3	2.3	1.1	1.1	0	0	0	0
	12.2	6.8	9.7	2.3	2.3	1.1	1.1	0	0	0	0
	12.3	6.8	9.7	2.3	2.3	1.1	1.1	0	0	0	0
	13	8.1	10.9	2.3	2.3	1.1	1.1	0	0	0	0
	13.1	8.1	10.9	2.3	2.3	1.1	1.1	0	0	0	0
	13.2	8.1	10.9	2.3	2.3	1.1	1.1	0	0	0	0
	13.3	8.1	10.9	2.3	2.3	1.1	1.1	0	0	0	0
	14	9.4	12.2	2.3	2.3	1.1	1.1	0	0	0	0
	14.1	9.4	12.2	2.3	2.3	1.1	1.1	0	0	0	0
	14.2	9.4	12.2	2.3	2.3	1.1	1.1	0	0	0	0
	14.3	9.4	12.2	2.3	2.3	1.1	1.1	0	0	0	0
	15	10.7	13.5	2.3	2.3	1.1	1.1	0	0	0	0
	15.1	10.7	13.5	2.3	2.3	1.1	1.1	0	0	0	0
	15.2	10.7	13.5	2.3	2.3	1.1	1.1	0	0	0	0
	15.3	10.7	13.5	2.3	2.3	1.1	1.1	0	0	0	0
	16	11.9	14.8	2.3	2.3	1.1	1.1	0	0	0	0
	16.1	11.9	14.8	2.3	2.3	1.1	1.1	0	0	0	0
	16.2	11.9	14.8	2.3	2.3	1.1	1.1	0	0	0	0
	16.3	11.9	14.8	2.3	2.3	1.1	1.1	0	0	0	0
	17	13.2	16.1	2.3	2.3	1.1	1.1	0	0	0	0
	17.1	13.2	16.1	2.3	2.3	1.1	1.1	0	0	0	0
	17.2	13.2	16.1	2.3	2.3	1.1	1.1	0	0	0	0
	17.3	13.2	16.1	2.3	2.3	1.1	1.1	0	0	0	0
DYS389I	18	14.5	17.4	2.3	2.3	1.1	1.1	0	0	0	0
DYS635	14	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	14.1	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	14.2	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	14.3	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	15	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW

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	15.1	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	15.2	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	15.3	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	16	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	16.1	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	16.2	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	16.3	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	17	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	17.1	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	17.2	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	17.3	5.8	12	2.3	11.4	1.7	1.7	0	0	0	0
	18	7	13.1	2.3	11.4	1.7	1.7	0	0	0	0
	18.1	7	13.1	2.3	11.4	1.7	1.7	0	0	0	0
	18.2	7	13.1	2.3	11.4	1.7	1.7	0	0	0	0
	18.3	7	13.1	2.3	11.4	1.7	1.7	0	0	0	0
	19	8.1	14.2	2.3	11.4	1.7	1.7	0	0	0	0
	19.1	8.1	14.2	2.3	11.4	1.7	1.7	0	0	0	0
	19.2	8.1	14.2	2.3	11.4	1.7	1.7	0	0	0	0
	19.3	8.1	14.2	2.3	11.4	1.7	1.7	0	0	0	0
	20	9.2	15.4	2.3	11.4	1.7	1.7	0	0	0	0
	20.1	9.2	15.4	2.3	11.4	1.7	1.7	0	0	0	0
	20.2	9.2	15.4	2.3	11.4	1.7	1.7	0	0	0	0
	20.3	9.2	15.4	2.3	11.4	1.7	1.7	0	0	0	0
DYS635	21	10.4	16.5	2.3	11.4	1.7	1.7	0	0	0	0
	21.1	10.4	16.5	2.3	11.4	1.7	1.7	0	0	0	0
	21.2	10.4	16.5	2.3	11.4	1.7	1.7	0	0	0	0
	21.3	10.4	16.5	2.3	11.4	1.7	1.7	0	0	0	0
	22	11.5	17.7	2.3	11.4	1.7	1.7	0	0	0	0
	22.1	11.5	17.7	2.3	11.4	1.7	1.7	0	0	0	0
	22.2	11.5	17.7	2.3	11.4	1.7	1.7	0	0	0	0
	22.3	11.5	17.7	2.3	11.4	1.7	1.7	0	0	0	0
	23	12.7	18.8	2.3	11.4	1.7	1.7	0	0	0	0
	23.1	12.7	18.8	2.3	11.4	1.7	1.7	0	0	0	0
	23.2	12.7	18.8	2.3	11.4	1.7	1.7	0	0	0	0
	23.3	12.7	18.8	2.3	11.4	1.7	1.7	0	0	0	0
	24	13.8	19.9	2.3	11.4	1.7	1.7	0	0	0	0
	24.1	13.8	19.9	2.3	11.4	1.7	1.7	0	0	0	0
	24.2	13.8	19.9	2.3	11.4	1.7	1.7	0	0	0	0
	24.3	13.8	19.9	2.3	11.4	1.7	1.7	0	0	0	0
	25	14.9	21.1	2.3	11.4	1.7	1.7	0	0	0	0
	25.1	14.9	21.1	2.3	11.4	1.7	1.7	0	0	0	0
	25.2	14.9	21.1	2.3	11.4	1.7	1.7	0	0	0	0
	25.3	14.9	21.1	2.3	11.4	1.7	1.7	0	0	0	0
	26	16.1	22.2	2.3	11.4	1.7	1.7	0	0	0	0
	26.1	16.1	22.2	2.3	11.4	1.7	1.7	0	0	0	0
	26.2	16.1	22.2	2.3	11.4	1.7	1.7	0	0	0	0
	26.3	16.1	22.2	2.3	11.4	1.7	1.7	0	0	0	0
	27	17.2	23.4	2.3	11.4	1.7	1.7	0	0	0	0
	27.1	17.2	23.4	2.3	11.4	1.7	1.7	0	0	0	0
	27.2	17.2	23.4	2.3	11.4	1.7	1.7	0	0	0	0
	27.3	17.2	23.4	2.3	11.4	1.7	1.7	0	0	0	0
	28	18.4	24.5	2.3	11.4	1.7	1.7	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
DYS635	28.1	18.4	24.5	2.3	11.4	1.7	1.7	0	0	0	0
	28.2	18.4	24.5	2.3	11.4	1.7	1.7	0	0	0	0
	28.3	18.4	24.5	2.3	11.4	1.7	1.7	0	0	0	0
	29	19.5	25.6	2.3	11.4	1.7	1.7	0	0	0	0
	29.1	19.5	25.6	2.3	11.4	1.7	1.7	0	0	0	0
	29.2	19.5	25.6	2.3	11.4	1.7	1.7	0	0	0	0
	29.3	19.5	25.6	2.3	11.4	1.7	1.7	0	0	0	0
	30	20.6	26.8	2.3	11.4	1.7	1.7	0	0	0	0
	30.1	20.6	26.8	2.3	11.4	1.7	1.7	0	0	0	0
	30.2	20.6	26.8	2.3	11.4	1.7	1.7	0	0	0	0
	30.3	20.6	26.8	2.3	11.4	1.7	1.7	0	0	0	0
	31	21.8	27.9	2.3	11.4	1.7	1.7	0	0	0	0
DYS389II	23	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	23.1	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	23.2	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	23.3	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	24	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	24.1	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	24.2	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	24.3	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	25	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	25.1	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	25.2	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	25.3	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	26	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	26.1	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	26.2	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	26.3	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	27	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	27.1	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	27.2	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	27.3	14.6	23.4	3.6	7.9	1.8	3.6	0	0	0	0
	28	15.6	24.4	3.6	7.9	2	3.8	0	0	0	0
	28.1	15.6	24.4	3.6	7.9	2	3.8	0	0	0	0
	28.2	15.6	24.4	3.6	7.9	2	3.8	0	0	0	0
	28.3	15.6	24.4	3.6	7.9	2	3.8	0	0	0	0
	29	16.7	25.5	3.6	7.9	2.2	4	0	0	0	0
	29.1	16.7	25.5	3.6	7.9	2.2	4	0	0	0	0
	29.2	16.7	25.5	3.6	7.9	2.2	4	0	0	0	0
	29.3	16.7	25.5	3.6	7.9	2.2	4	0	0	0	0
DYS389II	30	17.7	26.5	3.6	7.9	2.4	4.2	0	0	0	0
	30.1	17.7	26.5	3.6	7.9	2.4	4.2	0	0	0	0
	30.2	17.7	26.5	3.6	7.9	2.4	4.2	0	0	0	0
	30.3	17.7	26.5	3.6	7.9	2.4	4.2	0	0	0	0
	31	18.8	27.6	3.6	7.9	2.6	4.3	0	0	0	0
	31.1	18.8	27.6	3.6	7.9	2.6	4.3	0	0	0	0
	31.2	18.8	27.6	3.6	7.9	2.6	4.3	0	0	0	0
	31.3	18.8	27.6	3.6	7.9	2.6	4.3	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	32	19.8	28.6	3.6	7.9	2.7	4.5	0	0	0	0
	32.1	19.8	28.6	3.6	7.9	2.7	4.5	0	0	0	0
	32.2	19.8	28.6	3.6	7.9	2.7	4.5	0	0	0	0
	32.3	19.8	28.6	3.6	7.9	2.7	4.5	0	0	0	0
	33	20.9	29.7	3.6	7.9	2.9	4.7	0	0	0	0
	33.1	20.9	29.7	3.6	7.9	2.9	4.7	0	0	0	0
DYS389II	33.2	20.9	29.7	3.6	7.9	2.9	4.7	0	0	0	0
	33.3	20.9	29.7	3.6	7.9	2.9	4.7	0	0	0	0
	34	21.9	30.7	3.6	7.9	3.1	4.9	0	0	0	0
	34.1	21.9	30.7	3.6	7.9	3.1	4.9	0	0	0	0
	34.2	21.9	30.7	3.6	7.9	3.1	4.9	0	0	0	0
	34.3	21.9	30.7	3.6	7.9	3.1	4.9	0	0	0	0
	35	23	31.8	3.6	7.9	3.3	5.1	0	0	0	0
	35.1	23	31.8	3.6	7.9	3.3	5.1	0	0	0	0
	35.2	23	31.8	3.6	7.9	3.3	5.1	0	0	0	0
	35.3	23	31.8	3.6	7.9	3.3	5.1	0	0	0	0
DYS389II	36	24	32.8	3.6	7.9	3.5	5.2	0	0	0	0
DYS627	10	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	10.1	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	10.2	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	10.3	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	11	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	11.1	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	11.2	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	11.3	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	12	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	12.1	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	12.2	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	12.3	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	13	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	13.1	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	13.2	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	13.3	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	14	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	14.1	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	14.2	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	14.3	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	15	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	15.1	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	15.2	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	15.3	9.8	12.1	2.8	4.4	1	1.9	2.5	3.7	0	0
	16	10.6	12.9	2.8	4.4	1	1.9	2.5	3.7	0	0
	16.1	10.6	12.9	2.8	4.4	1	1.9	2.5	3.7	0	0
	16.2	10.6	12.9	2.8	4.4	1	1.9	2.5	3.7	0	0
	16.3	10.6	12.9	2.8	4.4	1	1.9	2.5	3.7	0	0
	17	11.3	13.6	2.8	4.4	1.1	2	2.5	3.7	0	0
	17.1	11.3	13.6	2.8	4.4	1.1	2	2.5	3.7	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	17.2	11.3	13.6	2.8	4.4	1.1	2	2.5	3.7	0	0
	17.3	11.3	13.6	2.8	4.4	1.1	2	2.5	3.7	0	0
	18	12.1	14.4	2.8	4.4	1.2	2.1	2.5	3.7	0	0
	18.1	12.1	14.4	2.8	4.4	1.2	2.1	2.5	3.7	0	0
	18.2	12.1	14.4	2.8	4.4	1.2	2.1	2.5	3.7	0	0
	18.3	12.1	14.4	2.8	4.4	1.2	2.1	2.5	3.7	0	0
DYS627	19	12.8	15.1	2.8	4.4	1.3	2.2	2.5	3.7	0	0
	19.1	12.8	15.1	2.8	4.4	1.3	2.2	2.5	3.7	0	0
	19.2	12.8	15.1	2.8	4.4	1.3	2.2	2.5	3.7	0	0
	19.3	12.8	15.1	2.8	4.4	1.3	2.2	2.5	3.7	0	0
	20	13.6	15.9	2.8	4.4	1.4	2.3	2.5	3.7	0	0
	20.1	13.6	15.9	2.8	4.4	1.4	2.3	2.5	3.7	0	0
	20.2	13.6	15.9	2.8	4.4	1.4	2.3	2.5	3.7	0	0
DYS627	20.3	13.6	15.9	2.8	4.4	1.4	2.3	2.5	3.7	0	0
	21	14.4	16.7	2.8	4.4	1.5	2.4	2.5	3.7	0	0
	21.1	14.4	16.7	2.8	4.4	1.5	2.4	2.5	3.7	0	0
	21.2	14.4	16.7	2.8	4.4	1.5	2.4	2.5	3.7	0	0
	21.3	14.4	16.7	2.8	4.4	1.5	2.4	2.5	3.7	0	0
	22	15.1	17.4	2.8	4.4	1.6	2.5	2.5	3.7	0	0
	22.1	15.1	17.4	2.8	4.4	1.6	2.5	2.5	3.7	0	0
	22.2	15.1	17.4	2.8	4.4	1.6	2.5	2.5	3.7	0	0
	22.3	15.1	17.4	2.8	4.4	1.6	2.5	2.5	3.7	0	0
	23	15.9	18.2	2.8	4.4	1.7	2.6	2.5	3.7	0	0
	23.1	15.9	18.2	2.8	4.4	1.7	2.6	2.5	3.7	0	0
	23.2	15.9	18.2	2.8	4.4	1.7	2.6	2.5	3.7	0	0
	23.3	15.9	18.2	2.8	4.4	1.7	2.6	2.5	3.7	0	0
	24	16.6	18.9	2.8	4.4	1.8	2.7	2.5	3.7	0	0
	24.1	16.6	18.9	2.8	4.4	1.8	2.7	2.5	3.7	0	0
	24.2	16.6	18.9	2.8	4.4	1.8	2.7	2.5	3.7	0	0
	24.3	16.6	18.9	2.8	4.4	1.8	2.7	2.5	3.7	0	0
	25	17.4	19.7	2.8	4.4	1.9	2.8	2.5	3.7	0	0
	25.1	17.4	19.7	2.8	4.4	1.9	2.8	2.5	3.7	0	0
	25.2	17.4	19.7	2.8	4.4	1.9	2.8	2.5	3.7	0	0
	25.3	17.4	19.7	2.8	4.4	1.9	2.8	2.5	3.7	0	0
	26	18.2	20.5	2.8	4.4	2	2.9	2.5	3.7	0	0
	26.1	18.2	20.5	2.8	4.4	2	2.9	2.5	3.7	0	0
	26.2	18.2	20.5	2.8	4.4	2	2.9	2.5	3.7	0	0
	26.3	18.2	20.5	2.8	4.4	2	2.9	2.5	3.7	0	0
	27	18.9	21.2	2.8	4.4	2.1	3	2.5	3.7	0	0
	27.1	18.9	21.2	2.8	4.4	2.1	3	2.5	3.7	0	0
	27.2	18.9	21.2	2.8	4.4	2.1	3	2.5	3.7	0	0
	27.3	18.9	21.2	2.8	4.4	2.1	3	2.5	3.7	0	0
DYS627	28	19.7	22	2.8	4.4	2.2	3.1	2.5	3.7	0	0
DYS460	6	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	6.1	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	6.2	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	6.3	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	7	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	7.1	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	7.2	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	7.3	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	8	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	8.1	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	8.2	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	8.3	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	9	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	9.1	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	9.2	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	9.3	7.4	13	3.1	6.5	1.7	1.7	0	0	0	0
	10	8.8	14.5	3.1	6.5	1.9	1.9	0	0	0	0
	10.1	8.8	14.5	3.1	6.5	1.9	1.9	0	0	0	0
	10.2	8.8	14.5	3.1	6.5	1.9	1.9	0	0	0	0
	10.3	8.8	14.5	3.1	6.5	1.9	1.9	0	0	0	0
	11	10.3	15.9	3.1	6.5	2.1	2.1	0	0	0	0
	11.1	10.3	15.9	3.1	6.5	2.1	2.1	0	0	0	0
	11.2	10.3	15.9	3.1	6.5	2.1	2.1	0	0	0	0
	11.3	10.3	15.9	3.1	6.5	2.1	2.1	0	0	0	0
	12	11.7	17.3	3.1	6.5	2.3	2.3	0	0	0	0
	12.1	11.7	17.3	3.1	6.5	2.3	2.3	0	0	0	0
	12.2	11.7	17.3	3.1	6.5	2.3	2.3	0	0	0	0
	12.3	11.7	17.3	3.1	6.5	2.3	2.3	0	0	0	0
	13	13.1	18.7	3.1	6.5	2.5	2.5	0	0	0	0
	13.1	13.1	18.7	3.1	6.5	2.5	2.5	0	0	0	0
	13.2	13.1	18.7	3.1	6.5	2.5	2.5	0	0	0	0
	13.3	13.1	18.7	3.1	6.5	2.5	2.5	0	0	0	0
	14	14.5	20.2	3.1	6.5	2.7	2.7	0	0	0	0
	14.1	14.5	20.2	3.1	6.5	2.7	2.7	0	0	0	0
	14.2	14.5	20.2	3.1	6.5	2.7	2.7	0	0	0	0
	14.3	14.5	20.2	3.1	6.5	2.7	2.7	0	0	0	0
DYS460	15	16	21.6	3.1	6.5	2.9	2.9	0	0	0	0
DYS458	10	8.2	14.9	2.6	5	1.7	3.1	0	0	0	0
	10.1	8.2	14.9	2.6	5	1.7	3.1	0	0	0	0
	10.2	8.2	14.9	2.6	5	1.7	3.1	0	0	0	0
	10.3	8.2	14.9	2.6	5	1.7	3.1	0	0	0	0
	11	8.2	14.9	2.6	5	1.7	3.1	0	0	0	0
	11.1	8.2	14.9	2.6	5	1.7	3.1	0	0	0	0
	11.2	8.2	14.9	2.6	5	1.7	3.1	0	0	0	0
	11.3	8.2	14.9	2.6	5	1.7	3.1	0	0	0	0
	12	9.2	15.8	2.6	5	1.7	3.1	0	0	0	0
	12.1	9.2	15.8	2.6	5	1.7	3.1	0	0	0	0
	12.2	9.2	15.8	2.6	5	1.7	3.1	0	0	0	0
	12.3	9.2	15.8	2.6	5	1.7	3.1	0	0	0	0
	13	10.1	16.7	2.6	5	1.7	3.1	0	0	0	0
	13.1	10.1	16.7	2.6	5	1.7	3.1	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	13.2	10.1	16.7	2.6	5	1.7	3.1	0	0	0	0
	13.3	10.1	16.7	2.6	5	1.7	3.1	0	0	0	0
	14	11	17.7	2.6	5	1.7	3.1	0	0	0	0
DYS458	14.1	11	17.7	2.6	5	1.7	3.1	0	0	0	0
	14.2	11	17.7	2.6	5	1.7	3.1	0	0	0	0
	14.3	11	17.7	2.6	5	1.7	3.1	0	0	0	0
	15	12	18.6	2.6	5	1.8	3.2	0	0	0	0
	15.1	12	18.6	2.6	5	1.8	3.2	0	0	0	0
	15.2	12	18.6	2.6	5	1.8	3.2	0	0	0	0
	15.3	12	18.6	2.6	5	1.8	3.2	0	0	0	0
	16	12.9	19.5	2.6	5	1.9	3.4	0	0	0	0
	16.1	12.9	19.5	2.6	5	1.9	3.4	0	0	0	0
	16.2	12.9	19.5	2.6	5	1.9	3.4	0	0	0	0
	16.3	12.9	19.5	2.6	5	1.9	3.4	0	0	0	0
	17	13.8	20.5	2.6	5	2	3.5	0	0	0	0
	17.1	13.8	20.5	2.6	5	2	3.5	0	0	0	0
	17.2	13.8	20.5	2.6	5	2	3.5	0	0	0	0
	17.3	13.8	20.5	2.6	5	2	3.5	0	0	0	0
	18	14.7	21.4	2.6	5	2.2	3.6	0	0	0	0
	18.1	14.7	21.4	2.6	5	2.2	3.6	0	0	0	0
	18.2	14.7	21.4	2.6	5	2.2	3.6	0	0	0	0
	18.3	14.7	21.4	2.6	5	2.2	3.6	0	0	0	0
	19	15.7	22.3	2.6	5	2.3	3.7	0	0	0	0
	19.1	15.7	22.3	2.6	5	2.3	3.7	0	0	0	0
	19.2	15.7	22.3	2.6	5	2.3	3.7	0	0	0	0
	19.3	15.7	22.3	2.6	5	2.3	3.7	0	0	0	0
	20	16.6	23.2	2.6	5	2.4	3.8	0	0	0	0
	20.1	16.6	23.2	2.6	5	2.4	3.8	0	0	0	0
	20.2	16.6	23.2	2.6	5	2.4	3.8	0	0	0	0
	20.3	16.6	23.2	2.6	5	2.4	3.8	0	0	0	0
	21	17.5	24.2	2.6	5	2.5	4	0	0	0	0
	21.1	17.5	24.2	2.6	5	2.5	4	0	0	0	0
	21.2	17.5	24.2	2.6	5	2.5	4	0	0	0	0
	21.3	17.5	24.2	2.6	5	2.5	4	0	0	0	0
	22	18.5	25.1	2.6	5	2.6	4.1	0	0	0	0
	22.1	18.5	25.1	2.6	5	2.6	4.1	0	0	0	0
	22.2	18.5	25.1	2.6	5	2.6	4.1	0	0	0	0
	22.3	18.5	25.1	2.6	5	2.6	4.1	0	0	0	0
	23	19.4	26	2.6	5	2.8	4.2	0	0	0	0
	23.1	19.4	26	2.6	5	2.8	4.2	0	0	0	0
	23.2	19.4	26	2.6	5	2.8	4.2	0	0	0	0
	23.3	19.4	26	2.6	5	2.8	4.2	0	0	0	0
	24	20.3	27	2.6	5	2.9	4.3	0	0	0	0
	24.1	20.3	27	2.6	5	2.9	4.3	0	0	0	0
	24.2	20.3	27	2.6	5	2.9	4.3	0	0	0	0
	24.3	20.3	27	2.6	5	2.9	4.3	0	0	0	0
DYS458	25	21.3	27.9	2.6	5	3	4.4	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
DYS19	8	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	8.1	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	8.2	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	8.3	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	9	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	9.1	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	9.2	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	9.3	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	10	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	10.1	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
DYS19	10.2	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	10.3	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	11	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	11.1	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	11.2	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	11.3	6.2	10.2	1.5	3.7	1.1	3	9.8	17.5	3.6	10.1
	12	7.3	11.4	1.7	4	1.1	3	9.8	17.5	3.6	10.1
	12.1	7.3	11.4	1.7	4	1.1	3	9.8	17.5	3.6	10.1
	12.2	7.3	11.4	1.7	4	1.1	3	9.8	17.5	3.6	10.1
	12.3	7.3	11.4	1.7	4	1.1	3	9.8	17.5	3.6	10.1
	13	8.4	12.5	2	4.2	1.1	3	9.8	17.5	3.6	10.1
	13.1	8.4	12.5	2	4.2	1.1	3	9.8	17.5	3.6	10.1
	13.2	8.4	12.5	2	4.2	1.1	3	9.8	17.5	3.6	10.1
	13.3	8.4	12.5	2	4.2	1.1	3	9.8	17.5	3.6	10.1
	14	9.6	13.6	2.2	4.4	1.2	3.1	9.8	17.5	3.6	10.1
	14.1	9.6	13.6	2.2	4.4	1.2	3.1	9.8	17.5	3.6	10.1
	14.2	9.6	13.6	2.2	4.4	1.2	3.1	9.8	17.5	3.6	10.1
	14.3	9.6	13.6	2.2	4.4	1.2	3.1	9.8	17.5	3.6	10.1
	15	10.7	14.7	2.4	4.6	1.3	3.3	9.8	17.5	3.6	10.1
	15.1	10.7	14.7	2.4	4.6	1.3	3.3	9.8	17.5	3.6	10.1
	15.2	10.7	14.7	2.4	4.6	1.3	3.3	9.8	17.5	3.6	10.1
	15.3	10.7	14.7	2.4	4.6	1.3	3.3	9.8	17.5	3.6	10.1
	16	11.8	15.8	2.6	4.8	1.5	3.4	9.8	17.5	3.6	10.1
	16.1	11.8	15.8	2.6	4.8	1.5	3.4	9.8	17.5	3.6	10.1
	16.2	11.8	15.8	2.6	4.8	1.5	3.4	9.8	17.5	3.6	10.1
	16.3	11.8	15.8	2.6	4.8	1.5	3.4	9.8	17.5	3.6	10.1
	17	12.9	17	2.8	5.1	1.6	3.5	9.8	17.5	3.6	10.1
	17.1	12.9	17	2.8	5.1	1.6	3.5	9.8	17.5	3.6	10.1
	17.2	12.9	17	2.8	5.1	1.6	3.5	9.8	17.5	3.6	10.1
	17.3	12.9	17	2.8	5.1	1.6	3.5	9.8	17.5	3.6	10.1
	18	14	18.1	3.1	5.3	1.8	3.7	9.8	17.5	3.6	10.1
	18.1	14	18.1	3.1	5.3	1.8	3.7	9.8	17.5	3.6	10.1
	18.2	14	18.1	3.1	5.3	1.8	3.7	9.8	17.5	3.6	10.1
	18.3	14	18.1	3.1	5.3	1.8	3.7	9.8	17.5	3.6	10.1
	19	15.2	19.2	3.3	5.5	1.9	3.8	9.8	17.5	3.6	10.1
	19.1	15.2	19.2	3.3	5.5	1.9	3.8	9.8	17.5	3.6	10.1
	19.2	15.2	19.2	3.3	5.5	1.9	3.8	9.8	17.5	3.6	10.1
	19.3	15.2	19.2	3.3	5.5	1.9	3.8	9.8	17.5	3.6	10.1
DYS19	20	16.3	20.3	3.5	5.7	2	4	9.8	17.5	3.6	10.1

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
YGATAH4	7	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	7.1	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	7.2	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	7.3	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	8	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	8.1	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	8.2	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	8.3	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	9	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	9.1	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	9.2	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	9.3	7.3	14.3	2.5	5.1	1.7	1.7	0	0	0	0
	10	8.4	15.4	2.5	5.1	1.7	1.7	0	0	0	0
	10.1	8.4	15.4	2.5	5.1	1.7	1.7	0	0	0	0
	10.2	8.4	15.4	2.5	5.1	1.7	1.7	0	0	0	0
YGATAH4	10.3	8.4	15.4	2.5	5.1	1.7	1.7	0	0	0	0
	11	9.5	16.5	2.5	5.1	1.7	1.7	0	0	0	0
	11.1	9.5	16.5	2.5	5.1	1.7	1.7	0	0	0	0
	11.2	9.5	16.5	2.5	5.1	1.7	1.7	0	0	0	0
	11.3	9.5	16.5	2.5	5.1	1.7	1.7	0	0	0	0
	12	10.6	17.6	2.5	5.1	1.7	1.7	0	0	0	0
	12.1	10.6	17.6	2.5	5.1	1.7	1.7	0	0	0	0
	12.2	10.6	17.6	2.5	5.1	1.7	1.7	0	0	0	0
	12.3	10.6	17.6	2.5	5.1	1.7	1.7	0	0	0	0
	13	11.7	18.7	2.5	5.1	1.7	1.7	0	0	0	0
	13.1	11.7	18.7	2.5	5.1	1.7	1.7	0	0	0	0
	13.2	11.7	18.7	2.5	5.1	1.7	1.7	0	0	0	0
	13.3	11.7	18.7	2.5	5.1	1.7	1.7	0	0	0	0
	14	12.8	19.8	2.5	5.1	1.7	1.7	0	0	0	0
	14.1	12.8	19.8	2.5	5.1	1.7	1.7	0	0	0	0
	14.2	12.8	19.8	2.5	5.1	1.7	1.7	0	0	0	0
	14.3	12.8	19.8	2.5	5.1	1.7	1.7	0	0	0	0
	15	13.9	20.9	2.5	5.1	1.7	1.7	0	0	0	0
	15.1	13.9	20.9	2.5	5.1	1.7	1.7	0	0	0	0
	15.2	13.9	20.9	2.5	5.1	1.7	1.7	0	0	0	0
	15.3	13.9	20.9	2.5	5.1	1.7	1.7	0	0	0	0
YGATAH4	16	15	22	2.5	5.1	1.7	1.7	0	0	0	0
DYS448	13	4.3	9.6	0	0	0	0	0	0	0	0
	13.1	4.3	9.6	0	0	0	0	0	0	0	0
	13.2	4.3	9.6	0	0	0	0	0	0	0	0
	13.3	4.3	9.6	0	0	0	0	0	0	0	0
	13.4	4.3	9.6	0	0	0	0	0	0	0	0
	13.5	4.3	9.6	0	0	0	0	0	0	0	0
	14	4.3	9.6	0	0	0	0	0	0	0	0
	14.1	4.3	9.6	0	0	0	0	0	0	0	0
	14.2	4.3	9.6	0	0	0	0	0	0	0	0
	14.3	4.3	9.6	0	0	0	0	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	14.4	4.3	9.6	0	0	0	0	0	0	0	0
	14.5	4.3	9.6	0	0	0	0	0	0	0	0
	15	4.3	9.6	0	0	0	0	0	0	0	0
	15.1	4.3	9.6	0	0	0	0	0	0	0	0
	15.2	4.3	9.6	0	0	0	0	0	0	0	0
	15.3	4.3	9.6	0	0	0	0	0	0	0	0
	15.4	4.3	9.6	0	0	0	0	0	0	0	0
	15.5	4.3	9.6	0	0	0	0	0	0	0	0
	16	4.3	9.6	0	0	0	0	0	0	0	0
	16.1	4.3	9.6	0	0	0	0	0	0	0	0
	16.2	4.3	9.6	0	0	0	0	0	0	0	0
	16.3	4.3	9.6	0	0	0	0	0	0	0	0
	16.4	4.3	9.6	0	0	0	0	0	0	0	0
	16.5	4.3	9.6	0	0	0	0	0	0	0	0
	17	4.3	9.6	0	0	0	0	0	0	0	0
	17.1	4.3	9.6	0	0	0	0	0	0	0	0
	17.2	4.3	9.6	0	0	0	0	0	0	0	0
	17.3	4.3	9.6	0	0	0	0	0	0	0	0
	17.4	4.3	9.6	0	0	0	0	0	0	0	0
	17.5	4.3	9.6	0	0	0	0	0	0	0	0
	18	4.3	9.6	0	0	0	0	0	0	0	0
	18.1	4.3	9.6	0	0	0	0	0	0	0	0
DYS448	18.2	4.3	9.6	0	0	0	0	0	0	0	0
	18.3	4.3	9.6	0	0	0	0	0	0	0	0
	18.4	4.3	9.6	0	0	0	0	0	0	0	0
	18.5	4.3	9.6	0	0	0	0	0	0	0	0
	19	4.6	9.9	0	0	0	0	0	0	0	0
	19.1	4.6	9.9	0	0	0	0	0	0	0	0
	19.2	4.6	9.9	0	0	0	0	0	0	0	0
	19.3	4.6	9.9	0	0	0	0	0	0	0	0
	19.4	4.6	9.9	0	0	0	0	0	0	0	0
	19.5	4.6	9.9	0	0	0	0	0	0	0	0
	20	4.8	10.1	0	0	0	0	0	0	0	0
	20.1	4.8	10.1	0	0	0	0	0	0	0	0
	20.2	4.8	10.1	0	0	0	0	0	0	0	0
	20.3	4.8	10.1	0	0	0	0	0	0	0	0
	20.4	4.8	10.1	0	0	0	0	0	0	0	0
	20.5	4.8	10.1	0	0	0	0	0	0	0	0
	21	5.1	10.4	0	0	0	0	0	0	0	0
	21.1	5.1	10.4	0	0	0	0	0	0	0	0
	21.2	5.1	10.4	0	0	0	0	0	0	0	0
	21.3	5.1	10.4	0	0	0	0	0	0	0	0
	21.4	5.1	10.4	0	0	0	0	0	0	0	0
	21.5	5.1	10.4	0	0	0	0	0	0	0	0
	22	5.3	10.7	0	0	0	0	0	0	0	0
	22.1	5.3	10.7	0	0	0	0	0	0	0	0
	22.2	5.3	10.7	0	0	0	0	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	23.3	5.6	10.9	0	0	0	0	0	0	0	0
	23.4	5.6	10.9	0	0	0	0	0	0	0	0
	23.5	5.6	10.9	0	0	0	0	0	0	0	0
	24	5.9	11.2	0	0	0	0	0	0	0	0
	24.1	5.9	11.2	0	0	0	0	0	0	0	0
	24.2	5.9	11.2	0	0	0	0	0	0	0	0
	24.3	5.9	11.2	0	0	0	0	0	0	0	0
	24.4	5.9	11.2	0	0	0	0	0	0	0	0
	24.5	5.9	11.2	0	0	0	0	0	0	0	0
DYS448	25	6.1	11.4	0	0	0	0	0	0	0	0
DYS391	4	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	4.1	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	4.2	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	4.3	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	5	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	5.1	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	5.2	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	5.3	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	6	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	6.1	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	6.2	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	6.3	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	7	7.2	11.7	3.7	3.7	0	0	0	0	0	0
DYS391	7.1	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	7.2	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	7.3	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	8	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	8.1	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	8.2	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	8.3	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	9	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	9.1	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	9.2	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	9.3	7.2	11.7	3.7	3.7	0	0	0	0	0	0
	10	8.4	12.9	3.7	3.7	0	0	0	0	0	0
	10.1	8.4	12.9	3.7	3.7	0	0	0	0	0	0
	10.2	8.4	12.9	3.7	3.7	0	0	0	0	0	0
	10.3	8.4	12.9	3.7	3.7	0	0	0	0	0	0
	11	9.6	14.1	3.7	3.7	0	0	0	0	0	0
	11.1	9.6	14.1	3.7	3.7	0	0	0	0	0	0
	11.2	9.6	14.1	3.7	3.7	0	0	0	0	0	0
	11.3	9.6	14.1	3.7	3.7	0	0	0	0	0	0
	12	10.8	15.3	3.7	3.7	0	0	0	0	0	0
	12.1	10.8	15.3	3.7	3.7	0	0	0	0	0	0
	12.2	10.8	15.3	3.7	3.7	0	0	0	0	0	0
	12.3	10.8	15.3	3.7	3.7	0	0	0	0	0	0
	13	12	16.5	3.7	3.7	0	0	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	13.1	12	16.5	3.7	3.7	0	0	0	0	0	0
	13.2	12	16.5	3.7	3.7	0	0	0	0	0	0
	13.3	12	16.5	3.7	3.7	0	0	0	0	0	0
	14	13.2	17.7	3.7	3.7	0	0	0	0	0	0
	14.1	13.2	17.7	3.7	3.7	0	0	0	0	0	0
	14.2	13.2	17.7	3.7	3.7	0	0	0	0	0	0
	14.3	13.2	17.7	3.7	3.7	0	0	0	0	0	0
	15	14.4	18.9	3.7	3.7	0	0	0	0	0	0
	15.1	14.4	18.9	3.7	3.7	0	0	0	0	0	0
	15.2	14.4	18.9	3.7	3.7	0	0	0	0	0	0
	15.3	14.4	18.9	3.7	3.7	0	0	0	0	0	0
	16	15.6	20.1	3.7	3.7	0	0	0	0	0	0
	16.1	15.6	20.1	3.7	3.7	0	0	0	0	0	0
	16.2	15.6	20.1	3.7	3.7	0	0	0	0	0	0
	16.3	15.6	20.1	3.7	3.7	0	0	0	0	0	0
DYS391	17	16.8	21.3	3.7	3.7	0	0	0	0	0	0
DYS456	9	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	9.1	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	9.2	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	9.3	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	10	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	10.1	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	10.2	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	10.3	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	11	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	11.1	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	11.2	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	11.3	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	12	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	12.1	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	12.2	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	12.3	10.8	17.5	3.7	8.4	1	3	0	0	0	0
	13	11.9	18.6	3.7	8.4	1	3	0	0	0	0
	13.1	11.9	18.6	3.7	8.4	1	3	0	0	0	0
	13.2	11.9	18.6	3.7	8.4	1	3	0	0	0	0
	13.3	11.9	18.6	3.7	8.4	1	3	0	0	0	0
	14	13	19.7	3.7	8.4	1.2	3.2	0	0	0	0
	14.1	13	19.7	3.7	8.4	1.2	3.2	0	0	0	0
	14.2	13	19.7	3.7	8.4	1.2	3.2	0	0	0	0
	14.3	13	19.7	3.7	8.4	1.2	3.2	0	0	0	0
	15	14	20.8	3.7	8.4	1.4	3.3	0	0	0	0
	15.1	14	20.8	3.7	8.4	1.4	3.3	0	0	0	0
	15.2	14	20.8	3.7	8.4	1.4	3.3	0	0	0	0
	15.3	14	20.8	3.7	8.4	1.4	3.3	0	0	0	0
DYS456	16	15.1	21.9	3.7	8.4	1.6	3.5	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	16.1	15.1	21.9	3.7	8.4	1.6	3.5	0	0	0	0
	16.2	15.1	21.9	3.7	8.4	1.6	3.5	0	0	0	0
	16.3	15.1	21.9	3.7	8.4	1.6	3.5	0	0	0	0
	17	16.2	23	3.7	8.4	1.7	3.7	0	0	0	0
	17.1	16.2	23	3.7	8.4	1.7	3.7	0	0	0	0
	17.2	16.2	23	3.7	8.4	1.7	3.7	0	0	0	0
	17.3	16.2	23	3.7	8.4	1.7	3.7	0	0	0	0
	18	17.3	24.1	3.7	8.4	1.9	3.9	0	0	0	0
	18.1	17.3	24.1	3.7	8.4	1.9	3.9	0	0	0	0
	18.2	17.3	24.1	3.7	8.4	1.9	3.9	0	0	0	0
	18.3	17.3	24.1	3.7	8.4	1.9	3.9	0	0	0	0
	19	18.4	25.1	3.7	8.4	2.1	4.1	0	0	0	0
	19.1	18.4	25.1	3.7	8.4	2.1	4.1	0	0	0	0
	19.2	18.4	25.1	3.7	8.4	2.1	4.1	0	0	0	0
	19.3	18.4	25.1	3.7	8.4	2.1	4.1	0	0	0	0
	20	19.5	26.2	3.7	8.4	2.3	4.2	0	0	0	0
	20.1	19.5	26.2	3.7	8.4	2.3	4.2	0	0	0	0
	20.2	19.5	26.2	3.7	8.4	2.3	4.2	0	0	0	0
	20.3	19.5	26.2	3.7	8.4	2.3	4.2	0	0	0	0
	21	20.6	27.3	3.7	8.4	2.5	4.4	0	0	0	0
	21.1	20.6	27.3	3.7	8.4	2.5	4.4	0	0	0	0
	21.2	20.6	27.3	3.7	8.4	2.5	4.4	0	0	0	0
	21.3	20.6	27.3	3.7	8.4	2.5	4.4	0	0	0	0
	22	21.7	28.4	3.7	8.4	2.6	4.6	0	0	0	0
	22.1	21.7	28.4	3.7	8.4	2.6	4.6	0	0	0	0
	22.2	21.7	28.4	3.7	8.4	2.6	4.6	0	0	0	0
	22.3	21.7	28.4	3.7	8.4	2.6	4.6	0	0	0	0
	23	22.8	29.5	3.7	8.4	2.8	4.8	0	0	0	0
DYS456	23.1	22.8	29.5	3.7	8.4	2.8	4.8	0	0	0	0
	23.2	22.8	29.5	3.7	8.4	2.8	4.8	0	0	0	0
	23.3	22.8	29.5	3.7	8.4	2.8	4.8	0	0	0	0
	24	23.9	30.6	3.7	8.4	3	5	0	0	0	0

DYS390	16	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	16.1	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	16.2	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	16.3	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	17	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	17.1	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	17.2	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	17.3	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	18	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	18.1	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	18.2	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	18.3	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	19	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	19.1	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	19.2	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	19.3	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	20	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	20.1	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	20.2	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	20.3	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	21	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	21.1	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	21.2	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	21.3	8.8	11.3	2.2	2.2	1.2	1.2	0	0	0	0
	22	9.9	12.3	2.2	2.2	1.3	1.3	0	0	0	0
	22.1	9.9	12.3	2.2	2.2	1.3	1.3	0	0	0	0
	22.2	9.9	12.3	2.2	2.2	1.3	1.3	0	0	0	0
	22.3	9.9	12.3	2.2	2.2	1.3	1.3	0	0	0	0
DYS390	23	10.9	13.4	2.2	2.2	1.4	1.4	0	0	0	0
	23.1	10.9	13.4	2.2	2.2	1.4	1.4	0	0	0	0
	23.2	10.9	13.4	2.2	2.2	1.4	1.4	0	0	0	0
	23.3	10.9	13.4	2.2	2.2	1.4	1.4	0	0	0	0
	24	12	14.4	2.2	2.2	1.5	1.5	0	0	0	0
	24.1	12	14.4	2.2	2.2	1.5	1.5	0	0	0	0
	24.2	12	14.4	2.2	2.2	1.5	1.5	0	0	0	0
	24.3	12	14.4	2.2	2.2	1.5	1.5	0	0	0	0
	25	13	15.4	2.2	2.2	1.6	1.6	0	0	0	0
	25.1	13	15.4	2.2	2.2	1.6	1.6	0	0	0	0
	25.2	13	15.4	2.2	2.2	1.6	1.6	0	0	0	0
	25.3	13	15.4	2.2	2.2	1.6	1.6	0	0	0	0
	26	14	16.5	2.2	2.2	1.7	1.7	0	0	0	0
	26.1	14	16.5	2.2	2.2	1.7	1.7	0	0	0	0
	26.2	14	16.5	2.2	2.2	1.7	1.7	0	0	0	0
	26.3	14	16.5	2.2	2.2	1.7	1.7	0	0	0	0
	27	15.1	17.5	2.2	2.2	1.8	1.8	0	0	0	0
	27.1	15.1	17.5	2.2	2.2	1.8	1.8	0	0	0	0
	27.2	15.1	17.5	2.2	2.2	1.8	1.8	0	0	0	0
	27.3	15.1	17.5	2.2	2.2	1.8	1.8	0	0	0	0
	28	16.1	18.6	2.2	2.2	1.9	1.9	0	0	0	0
	28.1	16.1	18.6	2.2	2.2	1.9	1.9	0	0	0	0
DYS390	28.2	16.1	18.6	2.2	2.2	1.9	1.9	0	0	0	0
	28.3	16.1	18.6	2.2	2.2	1.9	1.9	0	0	0	0
	29	17.2	19.6	2.2	2.2	2	2	0	0	0	0
	29.1	17.2	19.6	2.2	2.2	2	2	0	0	0	0
	29.2	17.2	19.6	2.2	2.2	2	2	0	0	0	0
	29.3	17.2	19.6	2.2	2.2	2	2	0	0	0	0
	30	18.2	20.6	2.2	2.2	2.1	2.1	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
DYS438	5	3.4	5.3	2	2	1	1	0	0	0	0
	5.1	3.4	5.3	2	2	1	1	0	0	0	0
	5.2	3.4	5.3	2	2	1	1	0	0	0	0
	5.3	3.4	5.3	2	2	1	1	0	0	0	0
	5.4	3.4	5.3	2	2	1	1	0	0	0	0
	6	3.4	5.3	2	2	1	1	0	0	0	0
	6.1	3.4	5.3	2	2	1	1	0	0	0	0
	6.2	3.4	5.3	2	2	1	1	0	0	0	0
	6.3	3.4	5.3	2	2	1	1	0	0	0	0
	6.4	3.4	5.3	2	2	1	1	0	0	0	0
	7	3.4	5.3	2	2	1	1	0	0	0	0
	7.1	3.4	5.3	2	2	1	1	0	0	0	0
	7.2	3.4	5.3	2	2	1	1	0	0	0	0
	7.3	3.4	5.3	2	2	1	1	0	0	0	0
	7.4	3.4	5.3	2	2	1	1	0	0	0	0
	8	3.4	5.3	2	2	1	1	0	0	0	0
	8.1	3.4	5.3	2	2	1	1	0	0	0	0
	8.2	3.4	5.3	2	2	1	1	0	0	0	0
	8.3	3.4	5.3	2	2	1	1	0	0	0	0
	8.4	3.4	5.3	2	2	1	1	0	0	0	0
	9	3.9	5.8	2	2	1	1	0	0	0	0
	9.1	3.9	5.8	2	2	1	1	0	0	0	0
	9.2	3.9	5.8	2	2	1	1	0	0	0	0
	9.3	3.9	5.8	2	2	1	1	0	0	0	0
	9.4	3.9	5.8	2	2	1	1	0	0	0	0
	10	4.4	6.3	2	2	1	1	0	0	0	0
	10.1	4.4	6.3	2	2	1	1	0	0	0	0
	10.2	4.4	6.3	2	2	1	1	0	0	0	0
	10.3	4.4	6.3	2	2	1	1	0	0	0	0
	10.4	4.4	6.3	2	2	1	1	0	0	0	0
DYS438	11	4.9	6.8	2	2	1	1	0	0	0	0
	11.1	4.9	6.8	2	2	1	1	0	0	0	0
	11.2	4.9	6.8	2	2	1	1	0	0	0	0
	11.3	4.9	6.8	2	2	1	1	0	0	0	0
	11.4	4.9	6.8	2	2	1	1	0	0	0	0
	12	5.4	7.3	2	2	1	1	0	0	0	0
	12.1	5.4	7.3	2	2	1	1	0	0	0	0
	12.2	5.4	7.3	2	2	1	1	0	0	0	0
	12.3	5.4	7.3	2	2	1	1	0	0	0	0
	12.4	5.4	7.3	2	2	1	1	0	0	0	0
	13	5.9	7.8	2	2	1	1	0	0	0	0
	13.1	5.9	7.8	2	2	1	1	0	0	0	0
	13.2	5.9	7.8	2	2	1	1	0	0	0	0
	13.3	5.9	7.8	2	2	1	1	0	0	0	0
	13.4	5.9	7.8	2	2	1	1	0	0	0	0
DYS438	14	6.4	8.3	2	2	1	1	0	0	0	0
	14.1	6.4	8.3	2	2	1	1	0	0	0	0
DYS438	14.2	6.4	8.3	2	2	1	1	0	0	0	0
	14.3	6.4	8.3	2	2	1	1	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	14.4	6.4	8.3	2	2	1	1	0	0	0	0
	15	6.9	8.8	2	2	1	1	0	0	0	0
	15.1	6.9	8.8	2	2	1	1	0	0	0	0
	15.2	6.9	8.8	2	2	1	1	0	0	0	0
	15.3	6.9	8.8	2	2	1	1	0	0	0	0
	15.4	6.9	8.8	2	2	1	1	0	0	0	0
	16	7.4	9.3	2	2	1	1	0	0	0	0
	16.1	7.4	9.3	2	2	1	1	0	0	0	0
	16.2	7.4	9.3	2	2	1	1	0	0	0	0
	16.3	7.4	9.3	2	2	1	1	0	0	0	0
	16.4	7.4	9.3	2	2	1	1	0	0	0	0
DYS438	17	7.9	9.8	2	2	1	1	0	0	0	0
DYS392	3	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	3.1	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	3.2	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	4	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	4.1	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	4.2	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	5	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	5.1	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	5.2	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	6	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	6.1	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	6.2	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	7	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	7.1	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	7.2	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	8	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	8.1	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	8.2	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	9	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	9.1	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	9.2	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	10	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	10.1	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	10.2	9.4	12.3	5.7	10	1.6	2.4	0	0	0	0
	11	11	14	6.9	11.2	1.6	2.4	0	0	0	0
	11.1	11	14	6.9	11.2	1.6	2.4	0	0	0	0
	11.2	11	14	6.9	11.2	1.6	2.4	0	0	0	0
DYS392	12	12.7	15.6	8.1	12.4	1.9	2.6	0	0	0	0
	12.1	12.7	15.6	8.1	12.4	1.9	2.6	0	0	0	0
	12.2	12.7	15.6	8.1	12.4	1.9	2.6	0	0	0	0
	13	14.3	17.3	9.3	13.6	2.1	2.9	0	0	0	0
	13.1	14.3	17.3	9.3	13.6	2.1	2.9	0	0	0	0
	13.2	14.3	17.3	9.3	13.6	2.1	2.9	0	0	0	0
	14	16	18.9	10.5	14.8	2.4	3.2	0	0	0	0
	14.1	16	18.9	10.5	14.8	2.4	3.2	0	0	0	0
	14.2	16	18.9	10.5	14.8	2.4	3.2	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	15	17.6	20.6	11.7	15.9	2.6	3.4	0	0	0	0
	15.1	17.6	20.6	11.7	15.9	2.6	3.4	0	0	0	0
	15.2	17.6	20.6	11.7	15.9	2.6	3.4	0	0	0	0
	16	19.3	22.2	12.9	17.1	2.9	3.7	0	0	0	0
DYS392	16.1	19.3	22.2	12.9	17.1	2.9	3.7	0	0	0	0
	16.2	19.3	22.2	12.9	17.1	2.9	3.7	0	0	0	0
	17	20.9	23.9	14	18.3	3.2	3.9	0	0	0	0
	17.1	20.9	23.9	14	18.3	3.2	3.9	0	0	0	0
	17.2	20.9	23.9	14	18.3	3.2	3.9	0	0	0	0
	18	22.6	25.5	15.2	19.5	3.4	4.2	0	0	0	0
	18.1	22.6	25.5	15.2	19.5	3.4	4.2	0	0	0	0
	18.2	22.6	25.5	15.2	19.5	3.4	4.2	0	0	0	0
	19	24.2	27.2	16.4	20.7	3.7	4.5	0	0	0	0
	19.1	24.2	27.2	16.4	20.7	3.7	4.5	0	0	0	0
	19.2	24.2	27.2	16.4	20.7	3.7	4.5	0	0	0	0
	20	25.9	28.8	17.6	21.9	3.9	4.7	0	0	0	0
	20.1	25.9	28.8	17.6	21.9	3.9	4.7	0	0	0	0
	20.2	25.9	28.8	17.6	21.9	3.9	4.7	0	0	0	0
DYS392	21	27.5	30.5	18.8	23.1	4.2	5	0	0	0	0

DYS518	31	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	31.1	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	31.2	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	31.3	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	32	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	32.1	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	32.2	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	32.3	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	33	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	33.1	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	33.2	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	33.3	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	34	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	34.1	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	34.2	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	34.3	19.1	24.2	5.7	10.6	2.4	3.3	0	0	0	0
	35	20.1	25.3	5.7	10.6	2.6	3.5	0	0	0	0
	35.1	20.1	25.3	5.7	10.6	2.6	3.5	0	0	0	0
	35.2	20.1	25.3	5.7	10.6	2.6	3.5	0	0	0	0
	35.3	20.1	25.3	5.7	10.6	2.6	3.5	0	0	0	0
	36	21.2	26.3	5.7	10.6	2.8	3.7	0	0	0	0
	36.1	21.2	26.3	5.7	10.6	2.8	3.7	0	0	0	0
	36.2	21.2	26.3	5.7	10.6	2.8	3.7	0	0	0	0
	36.3	21.2	26.3	5.7	10.6	2.8	3.7	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
DYS518	37	22.2	27.4	5.7	10.6	3	3.9	0	0	0	0
	37.1	22.2	27.4	5.7	10.6	3	3.9	0	0	0	0
	37.2	22.2	27.4	5.7	10.6	3	3.9	0	0	0	0
	37.3	22.2	27.4	5.7	10.6	3	3.9	0	0	0	0
	38	23.2	28.4	5.7	10.6	3.2	4.1	0	0	0	0
	38.1	23.2	28.4	5.7	10.6	3.2	4.1	0	0	0	0
	38.2	23.2	28.4	5.7	10.6	3.2	4.1	0	0	0	0
	38.3	23.2	28.4	5.7	10.6	3.2	4.1	0	0	0	0
	39	24.3	29.4	5.7	10.6	3.4	4.2	0	0	0	0
	39.1	24.3	29.4	5.7	10.6	3.4	4.2	0	0	0	0
	39.2	24.3	29.4	5.7	10.6	3.4	4.2	0	0	0	0
	39.3	24.3	29.4	5.7	10.6	3.4	4.2	0	0	0	0
	40	25.3	30.5	5.7	10.6	3.5	4.4	0	0	0	0
	40.1	25.3	30.5	5.7	10.6	3.5	4.4	0	0	0	0
	40.2	25.3	30.5	5.7	10.6	3.5	4.4	0	0	0	0
DYS518	40.3	25.3	30.5	5.7	10.6	3.5	4.4	0	0	0	0
	41	26.4	31.5	5.7	10.6	3.7	4.6	0	0	0	0
	41.1	26.4	31.5	5.7	10.6	3.7	4.6	0	0	0	0
	41.2	26.4	31.5	5.7	10.6	3.7	4.6	0	0	0	0
	41.3	26.4	31.5	5.7	10.6	3.7	4.6	0	0	0	0
	42	27.4	32.6	5.7	10.6	3.9	4.8	0	0	0	0
	42.1	27.4	32.6	5.7	10.6	3.9	4.8	0	0	0	0
	42.2	27.4	32.6	5.7	10.6	3.9	4.8	0	0	0	0
	42.3	27.4	32.6	5.7	10.6	3.9	4.8	0	0	0	0
	43	28.4	33.6	5.7	10.6	4.1	5	0	0	0	0
	43.1	28.4	33.6	5.7	10.6	4.1	5	0	0	0	0
	43.2	28.4	33.6	5.7	10.6	4.1	5	0	0	0	0
	43.3	28.4	33.6	5.7	10.6	4.1	5	0	0	0	0
	44	29.5	34.6	5.7	10.6	4.3	5.2	0	0	0	0
	44.1	29.5	34.6	5.7	10.6	4.3	5.2	0	0	0	0
	44.2	29.5	34.6	5.7	10.6	4.3	5.2	0	0	0	0
	44.3	29.5	34.6	5.7	10.6	4.3	5.2	0	0	0	0
	45	30.5	35.7	5.7	10.6	4.5	5.4	0	0	0	0
	45.1	30.5	35.7	5.7	10.6	4.5	5.4	0	0	0	0
	45.2	30.5	35.7	5.7	10.6	4.5	5.4	0	0	0	0
	45.3	30.5	35.7	5.7	10.6	4.5	5.4	0	0	0	0
	46	31.6	36.7	5.7	10.6	4.7	5.6	0	0	0	0
	46.1	31.6	36.7	5.7	10.6	4.7	5.6	0	0	0	0
	46.2	31.6	36.7	5.7	10.6	4.7	5.6	0	0	0	0
	46.3	31.6	36.7	5.7	10.6	4.7	5.6	0	0	0	0
	47	32.6	37.8	5.7	10.6	4.9	5.8	0	0	0	0
	47.1	32.6	37.8	5.7	10.6	4.9	5.8	0	0	0	0
	47.2	32.6	37.8	5.7	10.6	4.9	5.8	0	0	0	0
	47.3	32.6	37.8	5.7	10.6	4.9	5.8	0	0	0	0
	48	33.6	38.8	5.7	10.6	5.1	6	0	0	0	0
	48.1	33.6	38.8	5.7	10.6	5.1	6	0	0	0	0
	48.2	33.6	38.8	5.7	10.6	5.1	6	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	48.3	33.6	38.8	5.7	10.6	5.1	6	0	0	0	0
	49	34.7	39.8	5.7	10.6	5.3	6.1	0	0	0	0
	49.1	34.7	39.8	5.7	10.6	5.3	6.1	0	0	0	0
	49.2	34.7	39.8	5.7	10.6	5.3	6.1	0	0	0	0
	49.3	34.7	39.8	5.7	10.6	5.3	6.1	0	0	0	0
DYS518	50	35.7	40.9	5.7	10.6	5.4	6.3	0	0	0	0
DYS570	9	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	9.1	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	9.2	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	9.3	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	10	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	10.1	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	10.2	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	10.3	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	11	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	11.1	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	11.2	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	11.3	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	12	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	12.1	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	12.2	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	12.3	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	13	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	13.1	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	13.2	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	13.3	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	14	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	14.1	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	14.2	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
	14.3	10.3	13.7	2.9	5.7	2	4.3	0	0	0	0
DYS570	15	11.1	14.5	2.9	5.7	2	4.3	0	0	0	0
	15.1	11.1	14.5	2.9	5.7	2	4.3	0	0	0	0
	15.2	11.1	14.5	2.9	5.7	2	4.3	0	0	0	0
	15.3	11.1	14.5	2.9	5.7	2	4.3	0	0	0	0
	16	11.9	15.3	2.9	5.7	2	4.3	0	0	0	0
	16.1	11.9	15.3	2.9	5.7	2	4.3	0	0	0	0
	16.2	11.9	15.3	2.9	5.7	2	4.3	0	0	0	0
	16.3	11.9	15.3	2.9	5.7	2	4.3	0	0	0	0
	17	12.7	16.1	2.9	5.7	2	4.3	0	0	0	0
	17.1	12.7	16.1	2.9	5.7	2	4.3	0	0	0	0
	17.2	12.7	16.1	2.9	5.7	2	4.3	0	0	0	0
	17.3	12.7	16.1	2.9	5.7	2	4.3	0	0	0	0
	18	13.5	16.9	2.9	5.7	2	4.3	0	0	0	0
	18.1	13.5	16.9	2.9	5.7	2	4.3	0	0	0	0
	18.2	13.5	16.9	2.9	5.7	2	4.3	0	0	0	0
	18.3	13.5	16.9	2.9	5.7	2	4.3	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	19	14.3	17.7	2.9	5.7	2	4.3	0	0	0	0
	19.1	14.3	17.7	2.9	5.7	2	4.3	0	0	0	0
	19.2	14.3	17.7	2.9	5.7	2	4.3	0	0	0	0
	19.3	14.3	17.7	2.9	5.7	2	4.3	0	0	0	0
	20	15.1	18.5	2.9	5.7	2	4.3	0	0	0	0
	20.1	15.1	18.5	2.9	5.7	2	4.3	0	0	0	0
	20.2	15.1	18.5	2.9	5.7	2	4.3	0	0	0	0
	20.3	15.1	18.5	2.9	5.7	2	4.3	0	0	0	0
	21	15.9	19.3	2.9	5.7	2	4.3	0	0	0	0
	21.1	15.9	19.3	2.9	5.7	2	4.3	0	0	0	0
	21.2	15.9	19.3	2.9	5.7	2	4.3	0	0	0	0
	21.3	15.9	19.3	2.9	5.7	2	4.3	0	0	0	0
	22	16.7	20.1	2.9	5.7	2	4.3	0	0	0	0
	22.1	16.7	20.1	2.9	5.7	2	4.3	0	0	0	0
	22.2	16.7	20.1	2.9	5.7	2	4.3	0	0	0	0
	22.3	16.7	20.1	2.9	5.7	2	4.3	0	0	0	0
	23	17.5	21	2.9	5.7	2	4.3	0	0	0	0
DYS570	23.1	17.5	21	2.9	5.7	2	4.3	0	0	0	0
	23.2	17.5	21	2.9	5.7	2	4.3	0	0	0	0
	23.3	17.5	21	2.9	5.7	2	4.3	0	0	0	0
	24	18.4	21.8	2.9	5.7	2	4.3	0	0	0	0
	24.1	18.4	21.8	2.9	5.7	2	4.3	0	0	0	0
	24.2	18.4	21.8	2.9	5.7	2	4.3	0	0	0	0
	24.3	18.4	21.8	2.9	5.7	2	4.3	0	0	0	0
	25	19.2	22.6	2.9	5.7	2	4.3	0	0	0	0
	25.1	19.2	22.6	2.9	5.7	2	4.3	0	0	0	0
	25.2	19.2	22.6	2.9	5.7	2	4.3	0	0	0	0
	25.3	19.2	22.6	2.9	5.7	2	4.3	0	0	0	0
	26	20	23.4	2.9	5.7	2	4.3	0	0	0	0
	26.1	20	23.4	2.9	5.7	2	4.3	0	0	0	0
	26.2	20	23.4	2.9	5.7	2	4.3	0	0	0	0
	26.3	20	23.4	2.9	5.7	2	4.3	0	0	0	0
DYS570	27	20.8	24.2	2.9	5.7	2	4.3	0	0	0	0
DYS437	9	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	9.1	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	9.2	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	9.3	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	10	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	10.1	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	10.2	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	10.3	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	11	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	11.1	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	11.2	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	11.3	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	12	4.3	7.6	2.2	2.2	0	0	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	12.1	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	12.2	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	12.3	4.3	7.6	2.2	2.2	0	0	0	0	0	0
	13	5.3	8.6	2.2	2.2	0	0	0	0	0	0
	13.1	5.3	8.6	2.2	2.2	0	0	0	0	0	0
	13.2	5.3	8.6	2.2	2.2	0	0	0	0	0	0
	13.3	5.3	8.6	2.2	2.2	0	0	0	0	0	0
	14	6.3	9.6	2.2	2.2	0	0	0	0	0	0
	14.1	6.3	9.6	2.2	2.2	0	0	0	0	0	0
	14.2	6.3	9.6	2.2	2.2	0	0	0	0	0	0
	14.3	6.3	9.6	2.2	2.2	0	0	0	0	0	0
	15	7.3	10.7	2.2	2.2	0	0	0	0	0	0
	15.1	7.3	10.7	2.2	2.2	0	0	0	0	0	0
	15.2	7.3	10.7	2.2	2.2	0	0	0	0	0	0
	15.3	7.3	10.7	2.2	2.2	0	0	0	0	0	0
DYS437	16	8.4	11.7	2.2	2.2	0	0	0	0	0	0
	16.1	8.4	11.7	2.2	2.2	0	0	0	0	0	0
	16.2	8.4	11.7	2.2	2.2	0	0	0	0	0	0
	16.3	8.4	11.7	2.2	2.2	0	0	0	0	0	0
	17	9.4	12.7	2.2	2.2	0	0	0	0	0	0
	17.1	9.4	12.7	2.2	2.2	0	0	0	0	0	0
	17.2	9.4	12.7	2.2	2.2	0	0	0	0	0	0
	17.3	9.4	12.7	2.2	2.2	0	0	0	0	0	0
	18	10.4	13.7	2.2	2.2	0	0	0	0	0	0
	18.1	10.4	13.7	2.2	2.2	0	0	0	0	0	0
DYS437	18.2	10.4	13.7	2.2	2.2	0	0	0	0	0	0
	18.3	10.4	13.7	2.2	2.2	0	0	0	0	0	0
	19	11.4	14.7	2.2	2.2	0	0	0	0	0	0
DYS385	5	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	5.1	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	5.2	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	5.3	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	6	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	6.1	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	6.2	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	6.3	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	7	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	7.1	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	7.2	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	7.3	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	8	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	8.1	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	8.2	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	8.3	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	9	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	9.1	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	9.2	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	9.3	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	10	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	10.1	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	10.2	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	10.3	8.9	12.5	3	9.9	1.2	1.2	0	0	0	0
	11	9.8	13.4	3	9.9	1.3	1.3	0	0	0	0
	11.1	9.8	13.4	3	9.9	1.3	1.3	0	0	0	0
	11.2	9.8	13.4	3	9.9	1.3	1.3	0	0	0	0
	11.3	9.8	13.4	3	9.9	1.3	1.3	0	0	0	0
	12	10.7	14.3	3	9.9	1.5	1.5	0	0	0	0
	12.1	10.7	14.3	3	9.9	1.5	1.5	0	0	0	0
	12.2	10.7	14.3	3	9.9	1.5	1.5	0	0	0	0
	12.3	10.7	14.3	3	9.9	1.5	1.5	0	0	0	0
DYS385	13	11.6	15.2	3	9.9	1.6	1.6	0	0	0	0
	13.1	11.6	15.2	3	9.9	1.6	1.6	0	0	0	0
	13.2	11.6	15.2	3	9.9	1.6	1.6	0	0	0	0
	13.3	11.6	15.2	3	9.9	1.6	1.6	0	0	0	0
	14	12.5	16.1	3	9.9	1.7	1.7	0	0	0	0
	14.1	12.5	16.1	3	9.9	1.7	1.7	0	0	0	0
	14.2	12.5	16.1	3	9.9	1.7	1.7	0	0	0	0
	14.3	12.5	16.1	3	9.9	1.7	1.7	0	0	0	0
	15	13.4	17	3	9.9	1.9	1.9	0	0	0	0
	15.1	13.4	17	3	9.9	1.9	1.9	0	0	0	0
	15.2	13.4	17	3	9.9	1.9	1.9	0	0	0	0
	15.3	13.4	17	3	9.9	1.9	1.9	0	0	0	0
	16	14.3	17.9	3	9.9	2	2	0	0	0	0
	16.1	14.3	17.9	3	9.9	2	2	0	0	0	0
	16.2	14.3	17.9	3	9.9	2	2	0	0	0	0
	16.3	14.3	17.9	3	9.9	2	2	0	0	0	0
	17	15.2	18.8	3	9.9	2.2	2.2	0	0	0	0
	17.1	15.2	18.8	3	9.9	2.2	2.2	0	0	0	0
	17.2	15.2	18.8	3	9.9	2.2	2.2	0	0	0	0
DYS385	17.3	15.2	18.8	3	9.9	2.2	2.2	0	0	0	0
	18	16.1	19.7	3	9.9	2.3	2.3	0	0	0	0
	18.1	16.1	19.7	3	9.9	2.3	2.3	0	0	0	0
	18.2	16.1	19.7	3	9.9	2.3	2.3	0	0	0	0
	18.3	16.1	19.7	3	9.9	2.3	2.3	0	0	0	0
	19	17	20.6	3	9.9	2.4	2.4	0	0	0	0
	19.1	17	20.6	3	9.9	2.4	2.4	0	0	0	0
	19.2	17	20.6	3	9.9	2.4	2.4	0	0	0	0
	19.3	17	20.6	3	9.9	2.4	2.4	0	0	0	0
	20	17.9	21.5	3	9.9	2.6	2.6	0	0	0	0
	20.1	17.9	21.5	3	9.9	2.6	2.6	0	0	0	0
	20.2	17.9	21.5	3	9.9	2.6	2.6	0	0	0	0
	20.3	17.9	21.5	3	9.9	2.6	2.6	0	0	0	0
	21	18.8	22.4	3	9.9	2.7	2.7	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	21.1	18.8	22.4	3	9.9	2.7	2.7	0	0	0	0
	21.2	18.8	22.4	3	9.9	2.7	2.7	0	0	0	0
	21.3	18.8	22.4	3	9.9	2.7	2.7	0	0	0	0
	22	19.7	23.3	3	9.9	2.9	2.9	0	0	0	0
	22.1	19.7	23.3	3	9.9	2.9	2.9	0	0	0	0
	22.2	19.7	23.3	3	9.9	2.9	2.9	0	0	0	0
	22.3	19.7	23.3	3	9.9	2.9	2.9	0	0	0	0
	23	20.6	24.2	3	9.9	3	3	0	0	0	0
	23.1	20.6	24.2	3	9.9	3	3	0	0	0	0
	23.2	20.6	24.2	3	9.9	3	3	0	0	0	0
	23.3	20.6	24.2	3	9.9	3	3	0	0	0	0
	24	21.5	25.1	3	9.9	3.1	3.1	0	0	0	0
	24.1	21.5	25.1	3	9.9	3.1	3.1	0	0	0	0
	24.2	21.5	25.1	3	9.9	3.1	3.1	0	0	0	0
	24.3	21.5	25.1	3	9.9	3.1	3.1	0	0	0	0
	25	22.4	26	3	9.9	3.3	3.3	0	0	0	0
	25.1	22.4	26	3	9.9	3.3	3.3	0	0	0	0
	25.2	22.4	26	3	9.9	3.3	3.3	0	0	0	0
	25.3	22.4	26	3	9.9	3.3	3.3	0	0	0	0
	26	23.3	26.9	3	9.9	3.4	3.4	0	0	0	0
	26.1	23.3	26.9	3	9.9	3.4	3.4	0	0	0	0
	26.2	23.3	26.9	3	9.9	3.4	3.4	0	0	0	0
	26.3	23.3	26.9	3	9.9	3.4	3.4	0	0	0	0
	27	24.2	27.8	3	9.9	3.6	3.6	0	0	0	0
	27.1	24.2	27.8	3	9.9	3.6	3.6	0	0	0	0
	27.2	24.2	27.8	3	9.9	3.6	3.6	0	0	0	0
	27.3	24.2	27.8	3	9.9	3.6	3.6	0	0	0	0
	28	25.1	28.7	3	9.9	3.7	3.7	0	0	0	0
	28.1	25.1	28.7	3	9.9	3.7	3.7	0	0	0	0
	28.2	25.1	28.7	3	9.9	3.7	3.7	0	0	0	0
	28.3	25.1	28.7	3	9.9	3.7	3.7	0	0	0	0
DYS385	29	26	29.6	3	9.9	3.8	3.8	0	0	0	0
DYS449	21	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	21.1	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	21.2	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	21.3	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	22	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	22.1	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	22.2	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	22.3	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
DYS449	23	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	23.1	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	23.2	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	23.3	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	24	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	24.1	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	24.2	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	24.3	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	25	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	25.1	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	25.2	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	25.3	16.3	23.6	3.9	9.3	1.9	3.9	0	0	0	0
	26	17.1	24.5	3.9	9.3	2.1	4.1	0	0	0	0
	26.1	17.1	24.5	3.9	9.3	2.1	4.1	0	0	0	0
	26.2	17.1	24.5	3.9	9.3	2.1	4.1	0	0	0	0
	26.3	17.1	24.5	3.9	9.3	2.1	4.1	0	0	0	0
	27	18	25.3	3.9	9.3	2.3	4.3	0	0	0	0
	27.1	18	25.3	3.9	9.3	2.3	4.3	0	0	0	0
	27.2	18	25.3	3.9	9.3	2.3	4.3	0	0	0	0
	27.3	18	25.3	3.9	9.3	2.3	4.3	0	0	0	0
	28	18.8	26.2	3.9	9.3	2.4	4.5	0	0	0	0
	28.1	18.8	26.2	3.9	9.3	2.4	4.5	0	0	0	0
	28.2	18.8	26.2	3.9	9.3	2.4	4.5	0	0	0	0
	28.3	18.8	26.2	3.9	9.3	2.4	4.5	0	0	0	0
	29	19.7	27	3.9	9.3	2.6	4.6	0	0	0	0
	29.1	19.7	27	3.9	9.3	2.6	4.6	0	0	0	0
	29.2	19.7	27	3.9	9.3	2.6	4.6	0	0	0	0
	29.3	19.7	27	3.9	9.3	2.6	4.6	0	0	0	0
	30	20.5	27.9	3.9	9.3	2.8	4.8	0	0	0	0
	30.1	20.5	27.9	3.9	9.3	2.8	4.8	0	0	0	0
	30.2	20.5	27.9	3.9	9.3	2.8	4.8	0	0	0	0
	30.3	20.5	27.9	3.9	9.3	2.8	4.8	0	0	0	0
	31	21.4	28.7	3.9	9.3	3	5	0	0	0	0
	31.1	21.4	28.7	3.9	9.3	3	5	0	0	0	0
	31.2	21.4	28.7	3.9	9.3	3	5	0	0	0	0
	31.3	21.4	28.7	3.9	9.3	3	5	0	0	0	0
	32	22.2	29.6	3.9	9.3	3.2	5.2	0	0	0	0
	32.1	22.2	29.6	3.9	9.3	3.2	5.2	0	0	0	0
	32.2	22.2	29.6	3.9	9.3	3.2	5.2	0	0	0	0
	32.3	22.2	29.6	3.9	9.3	3.2	5.2	0	0	0	0
	33	23.1	30.4	3.9	9.3	3.3	5.4	0	0	0	0
	33.1	23.1	30.4	3.9	9.3	3.3	5.4	0	0	0	0
	33.2	23.1	30.4	3.9	9.3	3.3	5.4	0	0	0	0
	33.3	23.1	30.4	3.9	9.3	3.3	5.4	0	0	0	0
DYS449	34	23.9	31.3	3.9	9.3	3.5	5.5	0	0	0	0
	34.1	23.9	31.3	3.9	9.3	3.5	5.5	0	0	0	0
	34.2	23.9	31.3	3.9	9.3	3.5	5.5	0	0	0	0
	34.3	23.9	31.3	3.9	9.3	3.5	5.5	0	0	0	0
	35	24.8	32.1	3.9	9.3	3.7	5.7	0	0	0	0
	35.1	24.8	32.1	3.9	9.3	3.7	5.7	0	0	0	0
	35.2	24.8	32.1	3.9	9.3	3.7	5.7	0	0	0	0
	35.3	24.8	32.1	3.9	9.3	3.7	5.7	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
DYS449	36	25.6	33	3.9	9.3	3.9	5.9	0	0	0	0
	36.1	25.6	33	3.9	9.3	3.9	5.9	0	0	0	0
	36.2	25.6	33	3.9	9.3	3.9	5.9	0	0	0	0
	36.3	25.6	33	3.9	9.3	3.9	5.9	0	0	0	0
	37	26.5	33.8	3.9	9.3	4.1	6.1	0	0	0	0
	37.1	26.5	33.8	3.9	9.3	4.1	6.1	0	0	0	0
	37.2	26.5	33.8	3.9	9.3	4.1	6.1	0	0	0	0
	37.3	26.5	33.8	3.9	9.3	4.1	6.1	0	0	0	0
	38	27.3	34.7	3.9	9.3	4.2	6.3	0	0	0	0
	38.1	27.3	34.7	3.9	9.3	4.2	6.3	0	0	0	0
	38.2	27.3	34.7	3.9	9.3	4.2	6.3	0	0	0	0
	38.3	27.3	34.7	3.9	9.3	4.2	6.3	0	0	0	0
	39	28.2	35.5	3.9	9.3	4.4	6.4	0	0	0	0
	39.1	28.2	35.5	3.9	9.3	4.4	6.4	0	0	0	0
	39.2	28.2	35.5	3.9	9.3	4.4	6.4	0	0	0	0
	39.3	28.2	35.5	3.9	9.3	4.4	6.4	0	0	0	0
	40	29	36.4	3.9	9.3	4.6	6.6	0	0	0	0
	40.1	29	36.4	3.9	9.3	4.6	6.6	0	0	0	0
	40.2	29	36.4	3.9	9.3	4.6	6.6	0	0	0	0
	40.3	29	36.4	3.9	9.3	4.6	6.6	0	0	0	0
DYS449	41	29.9	37.2	3.9	9.3	4.8	6.8	0	0	0	0
DYS393	6	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	6.1	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	6.2	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	6.3	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	7	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	7.1	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	7.2	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	7.3	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	8	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	8.1	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	8.2	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	8.3	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	9	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	9.1	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	9.2	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	9.3	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	10	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	10.1	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	10.2	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	10.3	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	11	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	11.1	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	11.2	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	11.3	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	12	11.3	20.1	4	10	1.7	3.8	0	0	0	0

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		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	12.1	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	12.2	11.3	20.1	4	10	1.7	3.8	0	0	0	0
	12.3	11.3	20.1	4	10	1.7	3.8	0	0	0	0
DYS393	13	12.5	21.3	4	10	1.9	4	0	0	0	0
	13.1	12.5	21.3	4	10	1.9	4	0	0	0	0
	13.2	12.5	21.3	4	10	1.9	4	0	0	0	0
	13.3	12.5	21.3	4	10	1.9	4	0	0	0	0
	14	13.8	22.6	4	10	2.1	4.3	0	0	0	0
	14.1	13.8	22.6	4	10	2.1	4.3	0	0	0	0
	14.2	13.8	22.6	4	10	2.1	4.3	0	0	0	0
	14.3	13.8	22.6	4	10	2.1	4.3	0	0	0	0
	15	15	23.8	4	10	2.4	4.5	0	0	0	0
	15.1	15	23.8	4	10	2.4	4.5	0	0	0	0
	15.2	15	23.8	4	10	2.4	4.5	0	0	0	0
	15.3	15	23.8	4	10	2.4	4.5	0	0	0	0
	16	16.3	25.1	4	10	2.6	4.7	0	0	0	0
	16.1	16.3	25.1	4	10	2.6	4.7	0	0	0	0
	16.2	16.3	25.1	4	10	2.6	4.7	0	0	0	0
	16.3	16.3	25.1	4	10	2.6	4.7	0	0	0	0
	17	17.6	26.4	4	10	2.8	5	0	0	0	0
	17.1	17.6	26.4	4	10	2.8	5	0	0	0	0
	17.2	17.6	26.4	4	10	2.8	5	0	0	0	0
	17.3	17.6	26.4	4	10	2.8	5	0	0	0	0
	18	18.8	27.6	4	10	3.1	5.2	0	0	0	0
	18.1	18.8	27.6	4	10	3.1	5.2	0	0	0	0
	18.2	18.8	27.6	4	10	3.1	5.2	0	0	0	0
	18.3	18.8	27.6	4	10	3.1	5.2	0	0	0	0
DYS393	19	20.1	28.9	4	10	3.3	5.4	0	0	0	0
DYS439	5	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	5.1	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	5.2	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	5.3	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	6	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	6.1	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	6.2	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	6.3	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	7	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	7.1	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	7.2	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	7.3	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	8	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	8.1	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	8.2	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	8.3	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	9	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	9.1	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	9.2	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	9.3	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	10	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	10.1	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	10.2	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	10.3	7.6	11.6	3.4	4.9	1.5	1.5	0	0	0	0
	11	8.6	12.6	3.4	4.9	1.5	1.5	0	0	0	0
	11.1	8.6	12.6	3.4	4.9	1.5	1.5	0	0	0	0
	11.2	8.6	12.6	3.4	4.9	1.5	1.5	0	0	0	0
	11.3	8.6	12.6	3.4	4.9	1.5	1.5	0	0	0	0
DYS439	12	9.6	13.6	3.4	4.9	1.5	1.5	0	0	0	0
	12.1	9.6	13.6	3.4	4.9	1.5	1.5	0	0	0	0
	12.2	9.6	13.6	3.4	4.9	1.5	1.5	0	0	0	0
	12.3	9.6	13.6	3.4	4.9	1.5	1.5	0	0	0	0
	13	10.6	14.6	3.4	4.9	1.5	1.5	0	0	0	0
	13.1	10.6	14.6	3.4	4.9	1.5	1.5	0	0	0	0
	13.2	10.6	14.6	3.4	4.9	1.5	1.5	0	0	0	0
	13.3	10.6	14.6	3.4	4.9	1.5	1.5	0	0	0	0
	14	11.6	15.6	3.4	4.9	1.5	1.5	0	0	0	0
	14.1	11.6	15.6	3.4	4.9	1.5	1.5	0	0	0	0
	14.2	11.6	15.6	3.4	4.9	1.5	1.5	0	0	0	0
	14.3	11.6	15.6	3.4	4.9	1.5	1.5	0	0	0	0
	15	12.6	16.6	3.4	4.9	1.5	1.5	0	0	0	0
	15.1	12.6	16.6	3.4	4.9	1.5	1.5	0	0	0	0
	15.2	12.6	16.6	3.4	4.9	1.5	1.5	0	0	0	0
	15.3	12.6	16.6	3.4	4.9	1.5	1.5	0	0	0	0
	16	13.6	17.6	3.4	4.9	1.5	1.5	0	0	0	0
	16.1	13.6	17.6	3.4	4.9	1.5	1.5	0	0	0	0
	16.2	13.6	17.6	3.4	4.9	1.5	1.5	0	0	0	0
	16.3	13.6	17.6	3.4	4.9	1.5	1.5	0	0	0	0
	17	14.6	18.6	3.4	4.9	1.5	1.5	0	0	0	0
	17.1	14.6	18.6	3.4	4.9	1.5	1.5	0	0	0	0
	17.2	14.6	18.6	3.4	4.9	1.5	1.5	0	0	0	0
	17.3	14.6	18.6	3.4	4.9	1.5	1.5	0	0	0	0
DYS439	18	15.6	19.6	3.4	4.9	1.5	1.5	0	0	0	0
DYS481	16	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	16.1	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	16.2	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	17	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	17.1	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	17.2	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	18	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	18.1	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	18.2	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	19	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	19.1	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	19.2	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-2 base pair		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	20	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	20.1	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	20.2	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	21	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	21.1	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	21.2	20.3	26.3	5.5	9.1	3.6	7	9.5	17.8	0	0
	22	21.6	27.6	5.5	9.1	4	7.5	9.5	17.8	0	0
	22.1	21.6	27.6	5.5	9.1	4	7.5	9.5	17.8	0	0
	22.2	21.6	27.6	5.5	9.1	4	7.5	9.5	17.8	0	0
	23	22.9	28.9	5.5	9.1	4.5	7.9	9.5	17.8	0	0
	23.1	22.9	28.9	5.5	9.1	4.5	7.9	9.5	17.8	0	0
	23.2	22.9	28.9	5.5	9.1	4.5	7.9	9.5	17.8	0	0
	24	24.2	30.2	5.5	9.1	4.9	8.4	9.5	17.8	0	0
	24.1	24.2	30.2	5.5	9.1	4.9	8.4	9.5	17.8	0	0
	24.2	24.2	30.2	5.5	9.1	4.9	8.4	9.5	17.8	0	0
	25	25.5	31.5	5.5	9.1	5.3	8.8	9.5	17.8	0	0
	25.1	25.5	31.5	5.5	9.1	5.3	8.8	9.5	17.8	0	0
	25.2	25.5	31.5	5.5	9.1	5.3	8.8	9.5	17.8	0	0
DYS481	26	26.8	32.8	5.5	9.1	5.8	9.2	9.5	17.8	0	0
	26.1	26.8	32.8	5.5	9.1	5.8	9.2	9.5	17.8	0	0
	26.2	26.8	32.8	5.5	9.1	5.8	9.2	9.5	17.8	0	0
	27	28.1	34.2	5.5	9.1	6.2	9.7	9.5	17.8	0	0
	27.1	28.1	34.2	5.5	9.1	6.2	9.7	9.5	17.8	0	0
	27.2	28.1	34.2	5.5	9.1	6.2	9.7	9.5	17.8	0	0
	28	29.4	35.5	5.5	9.1	6.7	10.1	9.5	17.8	0	0
	28.1	29.4	35.5	5.5	9.1	6.7	10.1	9.5	17.8	0	0
	28.2	29.4	35.5	5.5	9.1	6.7	10.1	9.5	17.8	0	0
	29	30.7	36.8	5.5	9.1	7.1	10.6	9.5	17.8	0	0
	29.1	30.7	36.8	5.5	9.1	7.1	10.6	9.5	17.8	0	0
	29.2	30.7	36.8	5.5	9.1	7.1	10.6	9.5	17.8	0	0
	30	32	38.1	5.5	9.1	7.5	11	9.5	17.8	0	0
	30.1	32	38.1	5.5	9.1	7.5	11	9.5	17.8	0	0
	30.2	32	38.1	5.5	9.1	7.5	11	9.5	17.8	0	0
	31	33.4	39.4	5.5	9.1	8	11.4	9.5	17.8	0	0
	31.1	33.4	39.4	5.5	9.1	8	11.4	9.5	17.8	0	0
	31.2	33.4	39.4	5.5	9.1	8	11.4	9.5	17.8	0	0
	32	34.7	40.7	5.5	9.1	8.4	11.9	9.5	17.8	0	0
	32.1	34.7	40.7	5.5	9.1	8.4	11.9	9.5	17.8	0	0
	32.2	34.7	40.7	5.5	9.1	8.4	11.9	9.5	17.8	0	0
DYS481	33	36	42	5.5	9.1	8.9	12.3	9.5	17.8	0	0
DYF387S1	29	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	29.1	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	29.2	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	29.3	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	30	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	30.1	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	30.2	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	30.3	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
	31	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	31.1	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	31.2	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	31.3	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	32	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	32.1	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	32.2	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	32.3	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	33	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	33.1	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	33.2	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	33.3	9.2	17.4	3.2	8.3	2.3	6.1	0	0	0	0
	34	10	18.3	3.2	8.3	2.3	6.1	0	0	0	0
	34.1	10	18.3	3.2	8.3	2.3	6.1	0	0	0	0
	34.2	10	18.3	3.2	8.3	2.3	6.1	0	0	0	0
	34.3	10	18.3	3.2	8.3	2.3	6.1	0	0	0	0
	35	10.9	19.2	3.2	8.3	2.3	6.1	0	0	0	0
	35.1	10.9	19.2	3.2	8.3	2.3	6.1	0	0	0	0
	35.2	10.9	19.2	3.2	8.3	2.3	6.1	0	0	0	0
	35.3	10.9	19.2	3.2	8.3	2.3	6.1	0	0	0	0
	36	11.8	20.1	3.2	8.3	2.3	6.1	0	0	0	0
	36.1	11.8	20.1	3.2	8.3	2.3	6.1	0	0	0	0
	36.2	11.8	20.1	3.2	8.3	2.3	6.1	0	0	0	0
	36.3	11.8	20.1	3.2	8.3	2.3	6.1	0	0	0	0
DYF387S1	37	12.7	20.9	3.2	8.3	2.3	6.1	0	0	0	0
	37.1	12.7	20.9	3.2	8.3	2.3	6.1	0	0	0	0
	37.2	12.7	20.9	3.2	8.3	2.3	6.1	0	0	0	0
	37.3	12.7	20.9	3.2	8.3	2.3	6.1	0	0	0	0
	38	13.6	21.8	3.2	8.3	2.3	6.1	0	0	0	0
	38.1	13.6	21.8	3.2	8.3	2.3	6.1	0	0	0	0
	38.2	13.6	21.8	3.2	8.3	2.3	6.1	0	0	0	0
	38.3	13.6	21.8	3.2	8.3	2.3	6.1	0	0	0	0
	39	14.4	22.7	3.2	8.3	2.3	6.1	0	0	0	0
	39.1	14.4	22.7	3.2	8.3	2.3	6.1	0	0	0	0
	39.2	14.4	22.7	3.2	8.3	2.3	6.1	0	0	0	0
	39.3	14.4	22.7	3.2	8.3	2.3	6.1	0	0	0	0
	40	15.3	23.6	3.2	8.3	2.3	6.1	0	0	0	0
	40.1	15.3	23.6	3.2	8.3	2.3	6.1	0	0	0	0
	40.2	15.3	23.6	3.2	8.3	2.3	6.1	0	0	0	0
	40.3	15.3	23.6	3.2	8.3	2.3	6.1	0	0	0	0
	41	16.2	24.5	3.2	8.3	2.3	6.1	0	0	0	0
	41.1	16.2	24.5	3.2	8.3	2.3	6.1	0	0	0	0
	41.2	16.2	24.5	3.2	8.3	2.3	6.1	0	0	0	0
	41.3	16.2	24.5	3.2	8.3	2.3	6.1	0	0	0	0
	42	17.1	25.3	3.2	8.3	2.3	6.1	0	0	0	0
	42.1	17.1	25.3	3.2	8.3	2.3	6.1	0	0	0	0
	42.2	17.1	25.3	3.2	8.3	2.3	6.1	0	0	0	0
	42.3	17.1	25.3	3.2	8.3	2.3	6.1	0	0	0	0
	43	18	26.2	3.2	8.3	2.3	6.1	0	0	0	0

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Locus	Allele	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		STD	LOW	STD	LOW	STD	LOW	STD	LOW	STD	LOW
DYF387S1	43.1	18	26.2	3.2	8.3	2.3	6.1	0	0	0	0
	43.2	18	26.2	3.2	8.3	2.3	6.1	0	0	0	0
	43.3	18	26.2	3.2	8.3	2.3	6.1	0	0	0	0
	44	18.8	27.1	3.2	8.3	2.3	6.1	0	0	0	0
	44.1	18.8	27.1	3.2	8.3	2.3	6.1	0	0	0	0
	44.2	18.8	27.1	3.2	8.3	2.3	6.1	0	0	0	0
	44.3	18.8	27.1	3.2	8.3	2.3	6.1	0	0	0	0
	45	19.7	28	3.2	8.3	2.3	6.1	0	0	0	0
DYS533	6	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	6.1	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	6.2	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	6.3	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	7	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	7.1	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	7.2	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	7.3	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	8	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	8.1	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	8.2	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	8.3	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	9	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	9.1	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	9.2	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	9.3	8.5	14.9	5.8	13.6	1.6	1.6	0	0	0	0
	10	9.7	16.1	5.8	13.6	1.8	1.8	0	0	0	0
	10.1	9.7	16.1	5.8	13.6	1.8	1.8	0	0	0	0
	10.2	9.7	16.1	5.8	13.6	1.8	1.8	0	0	0	0
	10.3	9.7	16.1	5.8	13.6	1.8	1.8	0	0	0	0
	11	10.9	17.3	5.8	13.6	2	2	0	0	0	0
	11.1	10.9	17.3	5.8	13.6	2	2	0	0	0	0
	11.2	10.9	17.3	5.8	13.6	2	2	0	0	0	0
	11.3	10.9	17.3	5.8	13.6	2	2	0	0	0	0
	12	12.1	18.5	5.8	13.6	2.2	2.2	0	0	0	0
	12.1	12.1	18.5	5.8	13.6	2.2	2.2	0	0	0	0
	12.2	12.1	18.5	5.8	13.6	2.2	2.2	0	0	0	0
	12.3	12.1	18.5	5.8	13.6	2.2	2.2	0	0	0	0
DYS533	13	13.3	19.6	5.8	13.6	2.4	2.4	0	0	0	0
	13.1	13.3	19.6	5.8	13.6	2.4	2.4	0	0	0	0
	13.2	13.3	19.6	5.8	13.6	2.4	2.4	0	0	0	0
	13.3	13.3	19.6	5.8	13.6	2.4	2.4	0	0	0	0
	14	14.5	20.8	5.8	13.6	2.7	2.7	0	0	0	0
	14.1	14.5	20.8	5.8	13.6	2.7	2.7	0	0	0	0
	14.2	14.5	20.8	5.8	13.6	2.7	2.7	0	0	0	0
	14.3	14.5	20.8	5.8	13.6	2.7	2.7	0	0	0	0
	15	15.7	22	5.8	13.6	2.9	2.9	0	0	0	0
	15.1	15.7	22	5.8	13.6	2.9	2.9	0	0	0	0
	15.2	15.7	22	5.8	13.6	2.9	2.9	0	0	0	0
	15.3	15.7	22	5.8	13.6	2.9	2.9	0	0	0	0

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<u>Locus</u>	<u>Allele</u>	N-1 repeat		N+1 repeat		N-2 repeat		N-0.5 repeat		N+0.5 repeat	
		<u>STD</u>	<u>LOW</u>	<u>STD</u>	<u>LOW</u>	<u>STD</u>	<u>LOW</u>	<u>STD</u>	<u>LOW</u>	<u>STD</u>	<u>LOW</u>
	16	16.9	23.2	5.8	13.6	3.1	3.1	0	0	0	0
	16.1	16.9	23.2	5.8	13.6	3.1	3.1	0	0	0	0
	16.2	16.9	23.2	5.8	13.6	3.1	3.1	0	0	0	0
	16.3	16.9	23.2	5.8	13.6	3.1	3.1	0	0	0	0
	17	18	24.4	5.8	13.6	3.3	3.3	0	0	0	0
	17.1	18	24.4	5.8	13.6	3.3	3.3	0	0	0	0
DYSS33	17.2	18	24.4	5.8	13.6	3.3	3.3	0	0	0	0
	17.3	18	24.4	5.8	13.6	3.3	3.3	0	0	0	0
	18	19.2	25.6	5.8	13.6	3.5	3.5	0	0	0	0

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41.2 Common Dye Artifacts

41.2.1 GlobalFiler: Located on the U: Drive, in the DNA Training Folder, in the GlobalFiler folder is a PDF document titled “GlobalFiler Technical Note”. This document contains artifacts identified post-developmental validation for the GlobalFiler PCR Amplification Kit.

41.2.2 Yfiler Plus: Located on the U: Drive, in the DNA Training Folder, in the Yfiler Plus folder is a PDF document titled “Yfiler Plus User Guide”. Pages 79-83 discuss artifact observation in this kit.

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41.3 Control Profiles

41.3.1 GlobalFiler

41.3.1.1 EP1

Dye	Loci					
6-FAM	D3S1358	vWA	D16S539	CSF1PO	TPOX	
	14, 18	16, 18	12, 13	10, 11	8, 10	
VIC	Yindel	Amel	D8S1179	D21S11	D18S51	DYS391
	2	X, Y	10, 14	30	14, 16	11
NED	D2S441	D19S433	TH01		FGA	
	14	14, 15	7, 9.3		20, 22	
TAZ	D22S1045	D5S818	D13S317	D7S820	SE33	
	16	9, 11	10, 11	8, 9	17, 28.2	
SID	D10S1248	D1S1656	D12S391		D2S1338	
	14, 16	15, 15.3	17, 22		17, 23	

41.3.1.2 POS (Control 007)

Dye	Loci					
6-FAM	D3S1358	vWA	D16S539	CSF1PO	TPOX	
	15, 16	14, 16	9, 10	11, 12	8	
VIC	Yindel	Amel	D8S1179	D21S11	D18S51	DYS391
	2	X, Y	12, 13	28, 31	12, 15	11
NED	D2S441	D19S433	TH01		FGA	
	14, 15	14, 15	7, 9.3		24, 26	
TAZ	D22S1045	D5S818	D13S317	D7S820	SE33	
	11, 16	11	11	7, 12	17, 25.2	
SID	D10S1248	D1S1656	D12S391		D2S1338	
	12, 15	13, 16	18, 19		20, 23	

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41.3.2 Yfiler Plus

41.3.2.1 EP1

Dye	Loci					
6-FAM	DYS576	DYS389I	DYS635	DYS389II	DYS627	
	18	13	23	29	25	
VIC	DYS460	DYS458	DYS19	YGATAH4	DYS448	DYS391
	11	16	15	12	18	11
NED	DYS456	DYS390	DYS438		DYS392	DYS518
	18	26	12		14	37
TAZ	DYS570	DYS437	DYS385 a/b		DYS449	
	18	15	12, 13		31	
SID	DYS393	DYS439	DYS481	DYF387S1		DYS533
	13	12	25	36, 37		12

41.3.2.2 Pos (Control 007)

Dye	Loci					
6-FAM	DYS576	DYS389I	DYS635	DYS389II	DYS627	
	19	13	24	29	21	
VIC	DYS460	DYS458	DYS19	YGATAH4	DYS448	DYS391
	11	17	15	13	19	11
NED	DYS456	DYS390	DYS438		DYS392	DYS518
	15	24	12		13	37
TAZ	DYS570	DYS437	DYS385 a/b		DYS449	
	17	15	11, 14		30	
SID	DYS393	DYS439	DYS481	DYF387S1		DYS533
	13	12	22	35, 37		13