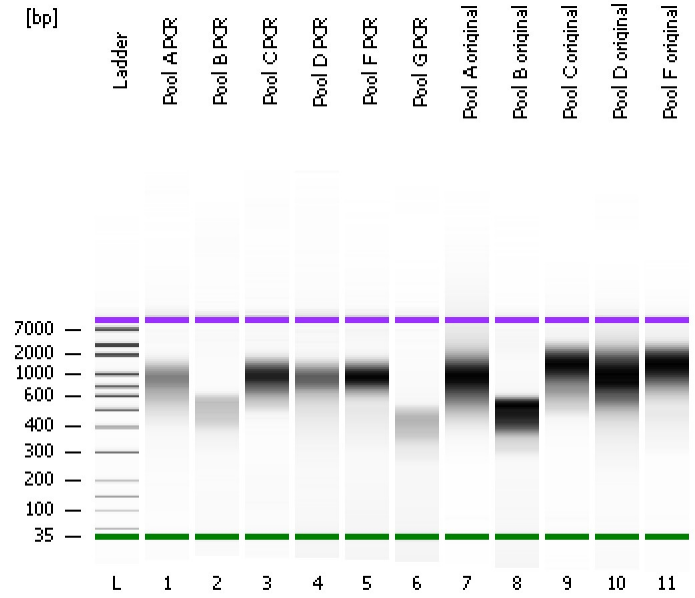
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

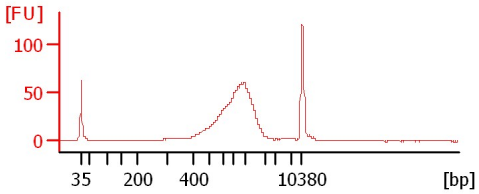
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

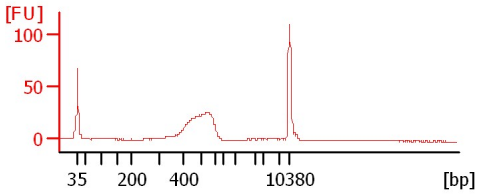
Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:

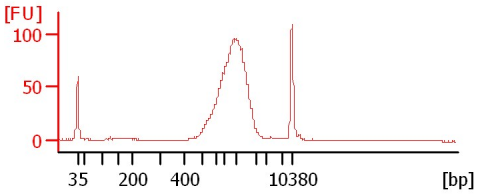
Pool A PCR



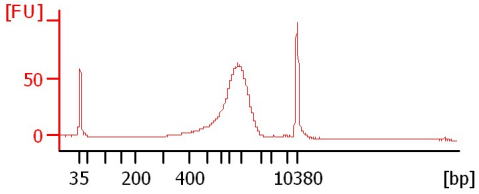
Pool B PCR



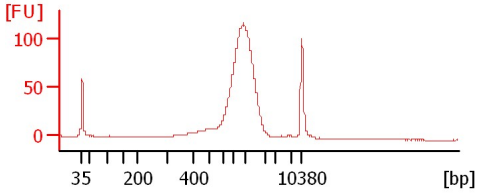
Pool C PCR



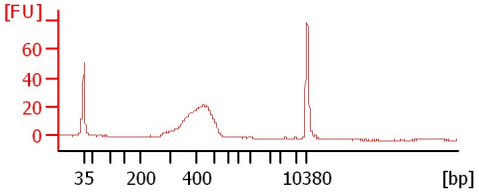
Pool D PCR



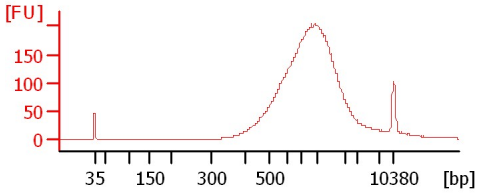
Pool F PCR



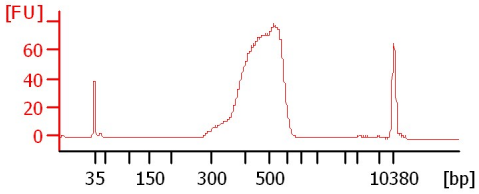
Pool G PCR



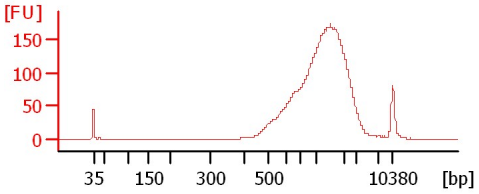
Pool A original



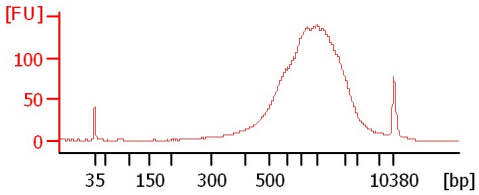
Pool B original



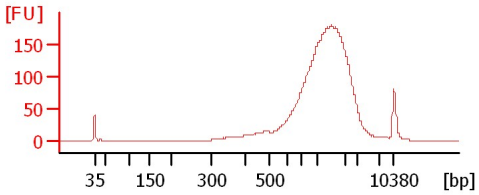
Pool C original



Pool D original



Pool F original



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Pool A PCR		☐	✔			
Pool B PCR		☐	✔			
Pool C PCR		☐	✔			
Pool D PCR		☐	✔			
Pool F PCR		☐	✔			
Pool G PCR		☐	✔			
Pool A original		☐	✔			
Pool B original		☐	✔			
Pool C original		☐	✔			
Pool D original		☐	✔			
Pool F original		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/µl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/µl] : 125
Upper Marker Concentration [pg/µl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

Ladder

Ladder Peak	Size	Area
1	35	160
2	50	210
3	100	208
4	150	221
5	200	242
6	300	270
7	400	305
8	500	306
9	600	336
10	700	321
11	1000	366
12	2000	413
13	3000	411
14	7000	400
15	10380	214

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
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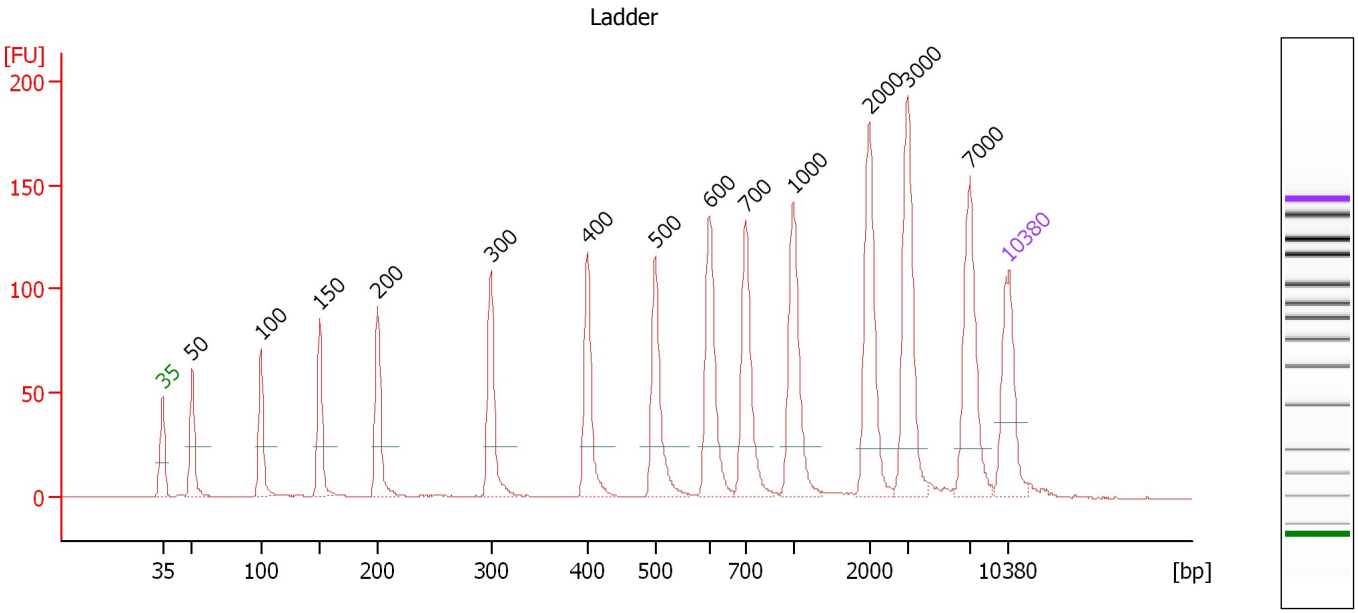
Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

Peak table for Ladder

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		35	125.00	5,411.3	Lower Marker	43.00
2		50	150.00	4,545.5	Ladder Peak	45.44
3		100	150.00	2,272.7	Ladder Peak	51.16
4		150	150.00	1,515.2	Ladder Peak	55.99
5		200	150.00	1,136.4	Ladder Peak	60.82
6		300	150.00	757.6	Ladder Peak	70.15
7		400	150.00	568.2	Ladder Peak	78.19
8		500	150.00	454.5	Ladder Peak	83.75
9		600	150.00	378.8	Ladder Peak	88.24
10		700	150.00	324.7	Ladder Peak	91.24
11		1,000	150.00	227.3	Ladder Peak	95.18
12		2,000	150.00	113.6	Ladder Peak	101.45
13		3,000	150.00	75.8	Ladder Peak	104.67
14		7,000	150.00	32.5	Ladder Peak	109.78
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
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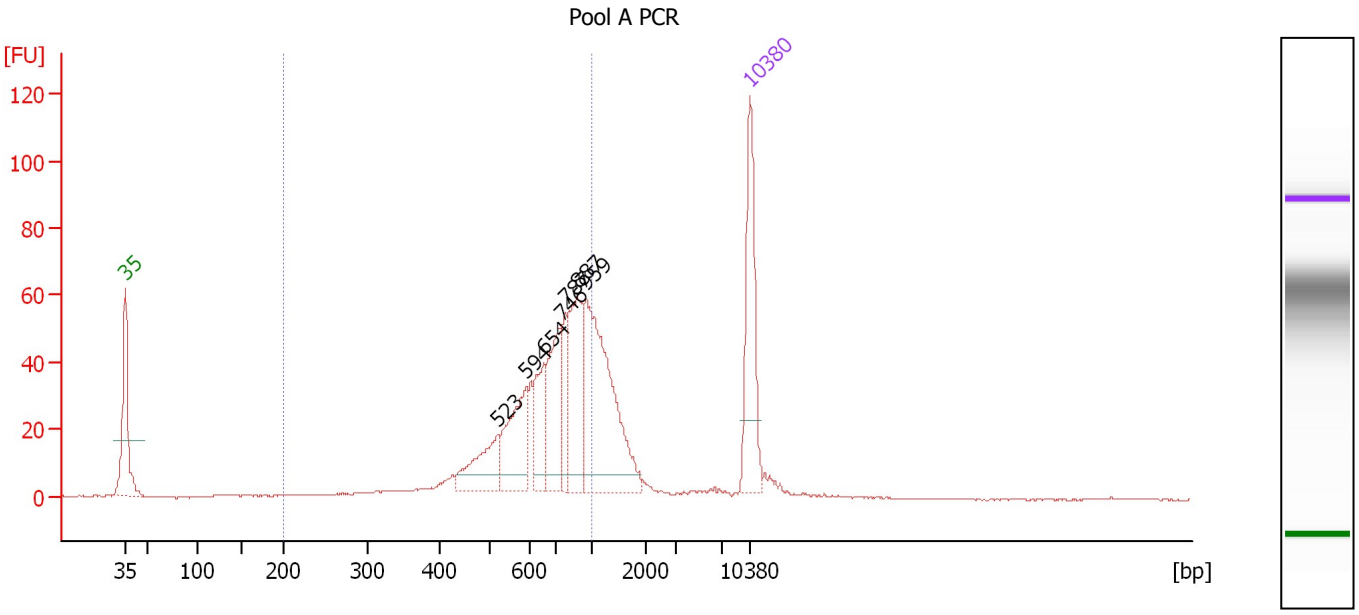
Electropherogram Summary Continued ...



Overall Results for sample 1 : Pool A PCR

Number of peaks found:	7	Corr. Area 1:	563.4
Noise:	0.1		

Peak table for sample 1 : Pool A PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	523	50.87	147.3		84.78
3	594	66.59	170.0		87.95
4	654	41.87	97.0		89.87
5	746	65.42	132.9		91.84
6	787	34.55	66.6		92.38
7	887	76.19	130.2		93.69
8	959	161.10	254.4		94.65
9	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 1 : Pool A PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	684	563.4	1,160.7	469.25	72	25.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
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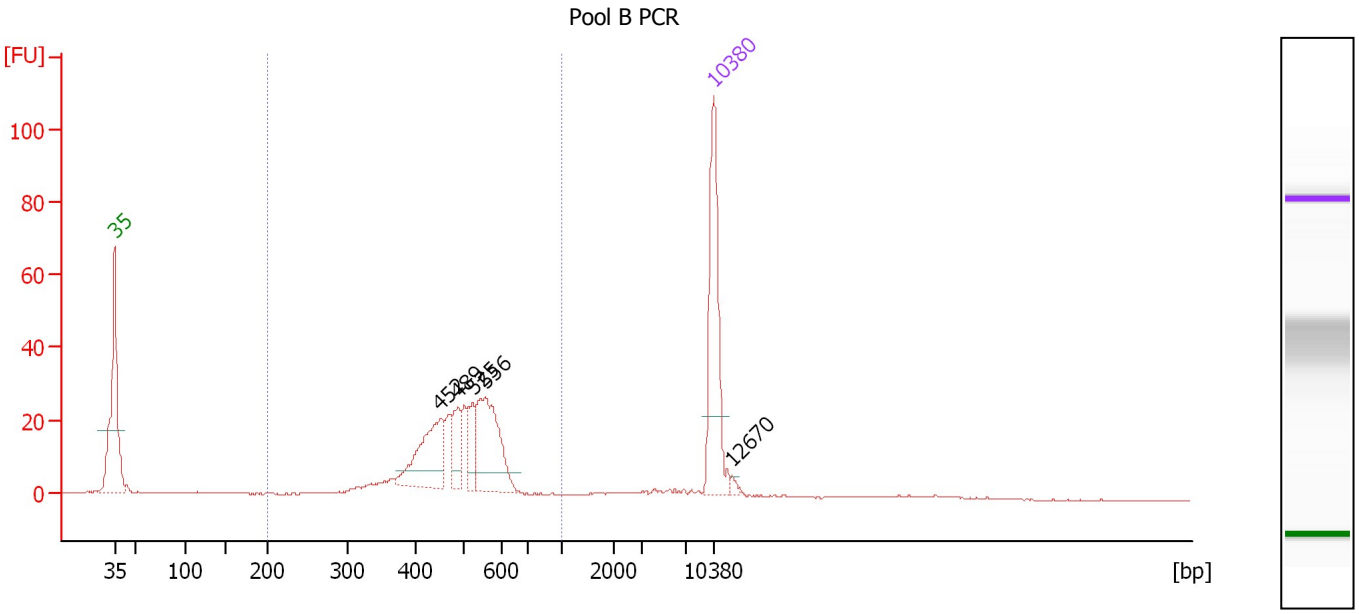
Electropherogram Summary Continued ...



Overall Results for sample 2 : Pool B PCR

Number of peaks found:	5	Corr. Area 1:	313.2
Noise:	0.2		

Peak table for sample 2 : Pool B PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	452	67.30	225.6		81.09
3	489	25.45	78.8		83.14
4	525	20.39	58.8		84.89
5	556	76.17	207.6		86.26
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,670	0.00	0.0		115.18

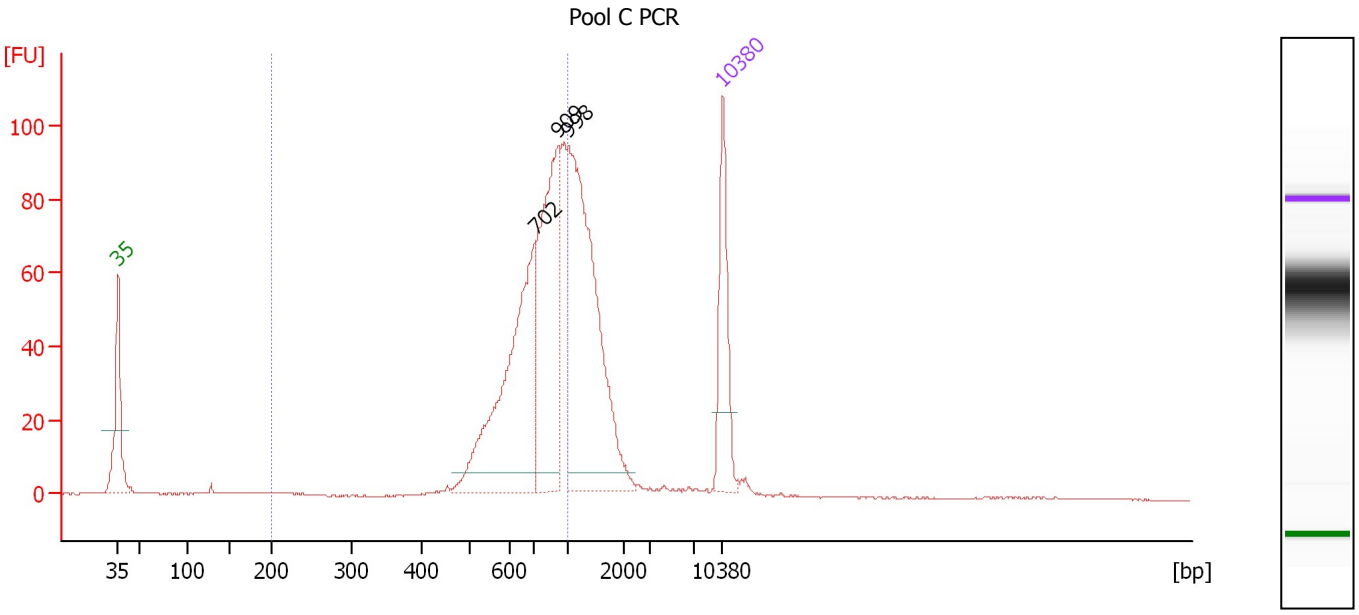
Region table for sample 2 : Pool B PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	490	313.2	906.3	280.70	88	17.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Pool C PCR

Number of peaks found:	3	Corr. Area 1:	641.2
Noise:	0.2		

Peak table for sample 3 : Pool C PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	702	269.63	581.6		91.27
3	909	211.59	352.6		93.99
4	998	308.47	468.1		95.16
5	10,380	75.00	10.9	Upper Marker	113.00

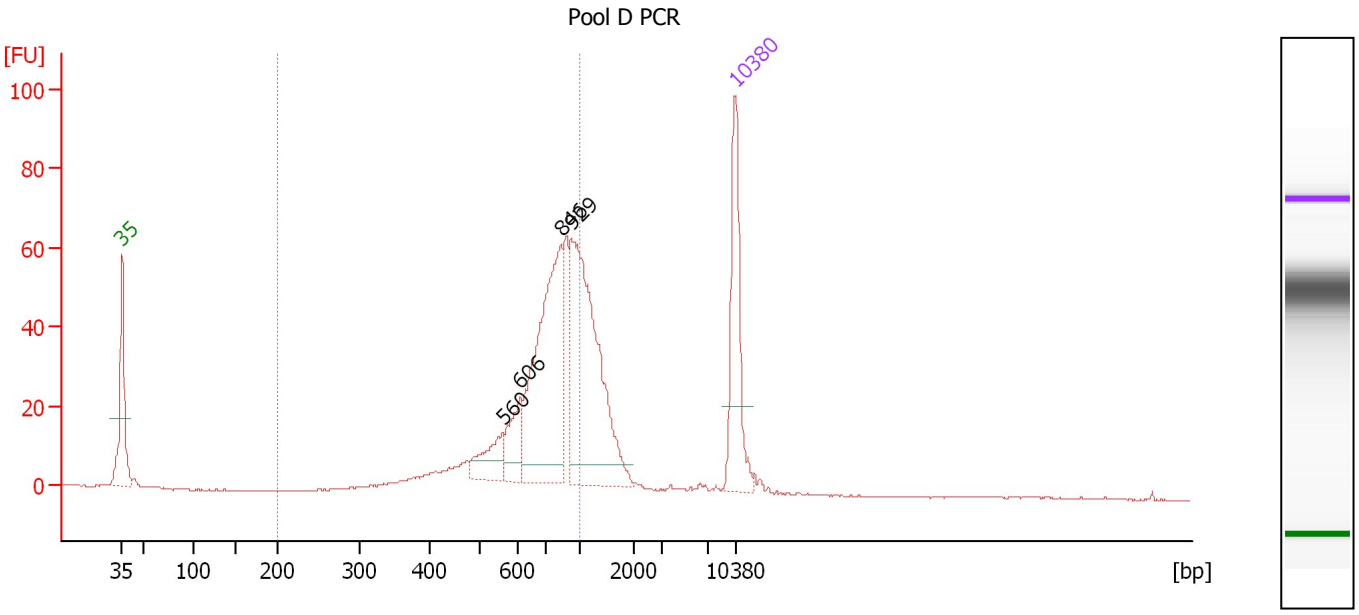
Region table for sample 3 : Pool C PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	745	641.2	1,284.9	597.42	61	19.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Pool D PCR

Number of peaks found:	4	Corr. Area 1:	475.9
Noise:	0.1		

Peak table for sample 4 : Pool D PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	560	33.80	91.4		86.46
3	606	34.32	85.9		88.41
4	846	185.87	332.9		93.16
5	929	207.31	338.0		94.25
6	10,380	75.00	10.9	Upper Marker	113.00

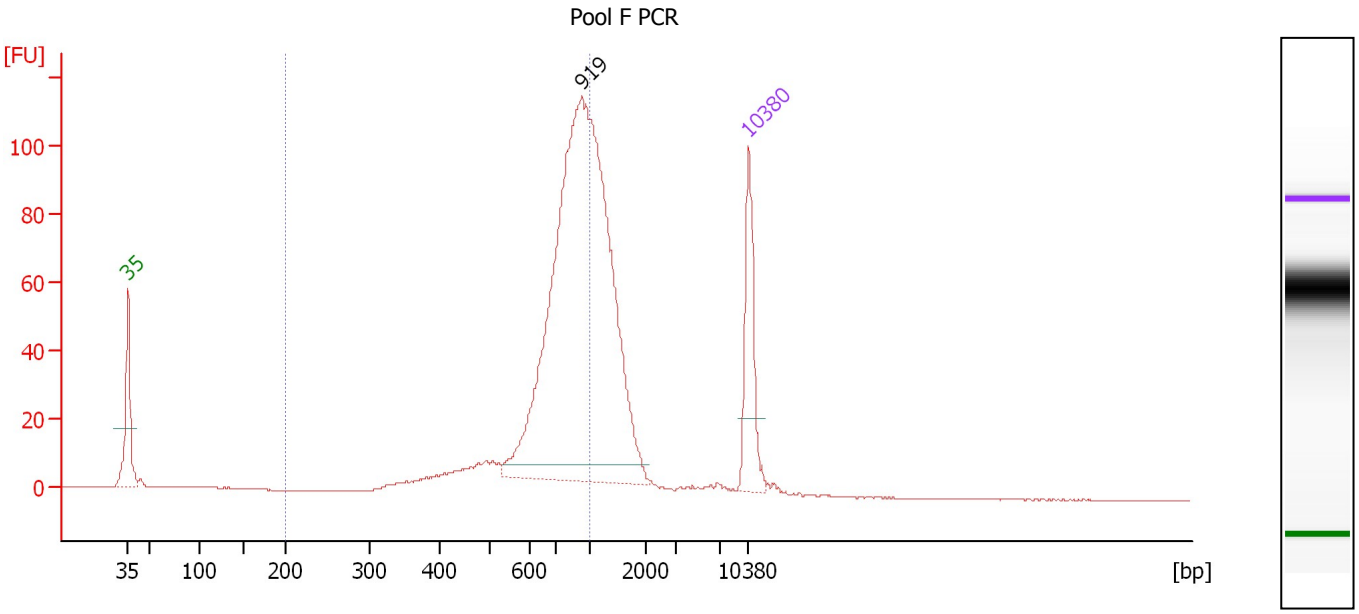
Region table for sample 4 : Pool D PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color	Co Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	719	475.9	1,046.7		453.98	70	23.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Pool F PCR

Number of peaks found:	1	Corr. Area 1:	681.8
Noise:	0.2		

Peak table for sample 5 : Pool F PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	919	804.77	1,326.8		94.12
3	10,380	75.00	10.9	Upper Marker	113.00

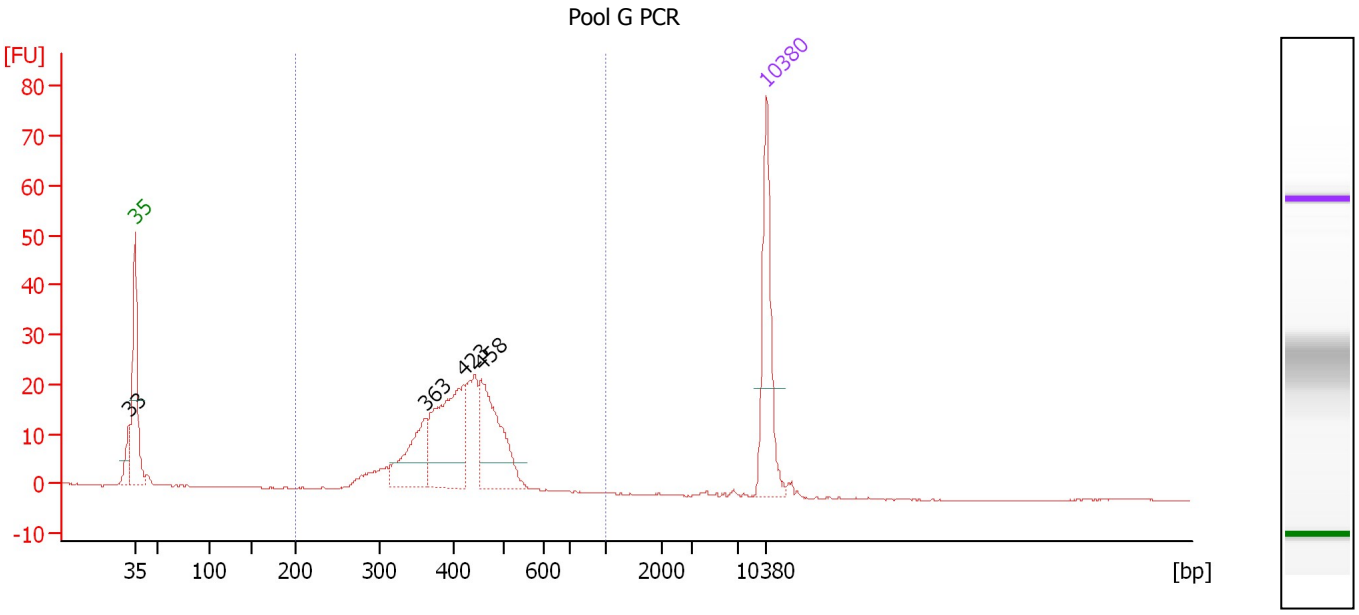
Region table for sample 5 : Pool F PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	756	681.8	1,425.0	658.31	65	21.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Pool G PCR

Number of peaks found:	4	Corr. Area 1:	270.3
Noise:	0.1		

Peak table for sample 6 : Pool G PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.35
2	35	125.00	5,411.3	Lower Marker	43.00
3	363	65.39	272.6		75.25
4	423	124.38	446.0		79.45
5	458	98.69	326.7		81.40
6	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 6 : Pool G PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	413	270.3	1,464.5	387.19	93	14.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
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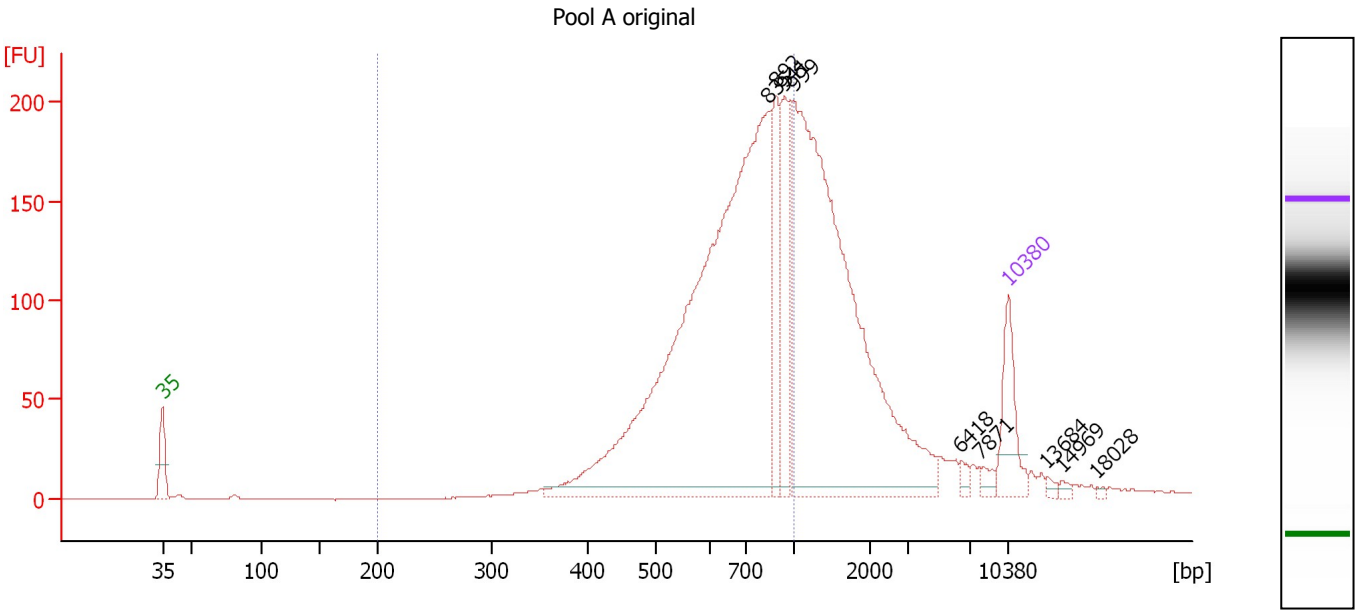
Electropherogram Summary Continued ...



Overall Results for sample 7 : Pool A original

Number of peaks found:	9	Corr. Area 1:	1,981.0
Noise:	0.1		

Peak table for sample 7 : Pool A original

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	835	1,335.33	2,424.1		93.01
3	892	135.95	230.9		93.77
4	941	133.46	214.9		94.41
5	999	978.45	1,484.3		95.16
6	6,418	9.57	2.3		109.04
7	7,871	12.84	2.5		110.61
8	10,380	75.00	10.9	Upper Marker	113.00
9	13,684	0.00	0.0		116.15
10	14,969	0.00	0.0		117.37
11	18,028	0.00	0.0		120.29

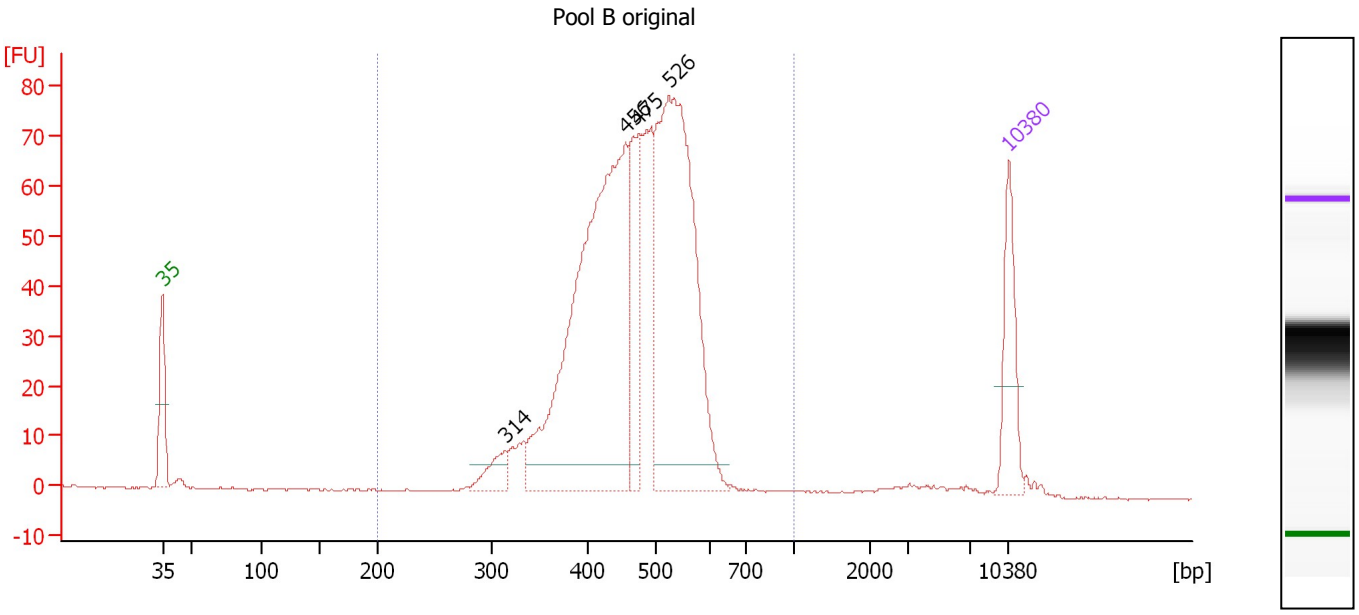
Region table for sample 7 : Pool A original

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	686	1,981.0	4,433.2	1,848.13	60	23.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Pool B original

Number of peaks found:	4	Corr. Area 1:	957.7
Noise:	0.2		

Peak table for sample 8 : Pool B original

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	314	38.89	187.4		71.31
3	456	712.61	2,366.5		81.32
4	475	133.16	424.9		82.35
5	526	568.77	1,638.0		84.92
6	10,380	75.00	10.9	Upper Marker	113.00

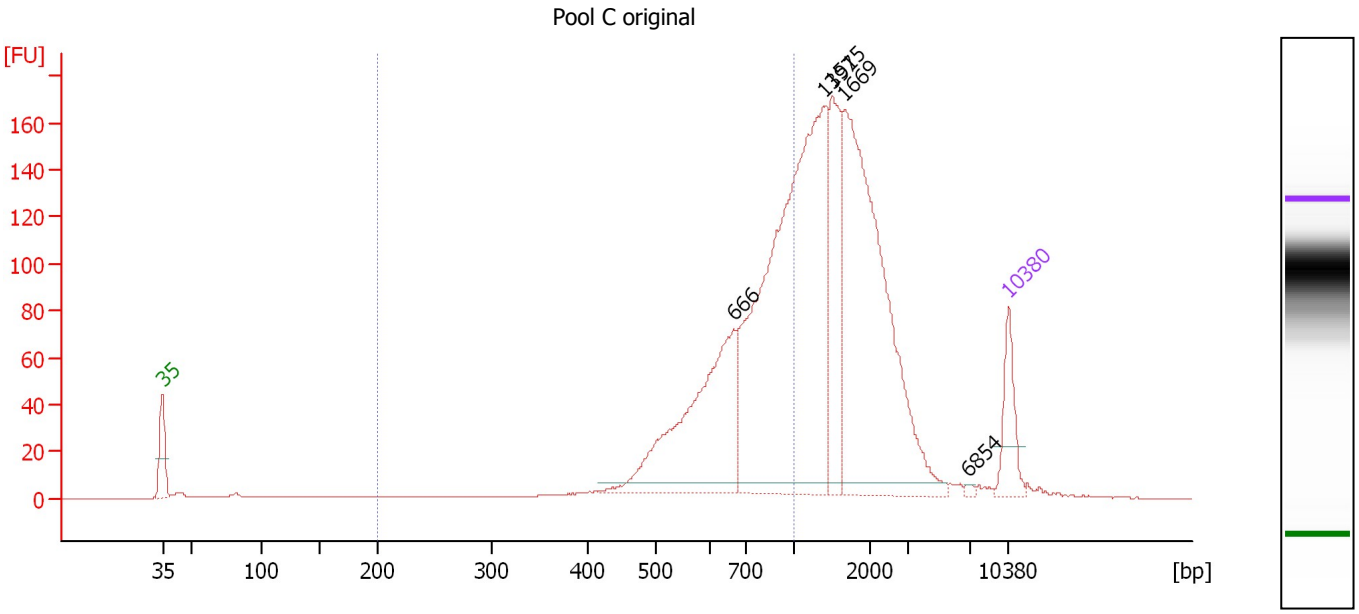
Region table for sample 8 : Pool B original

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	469	957.7	5,627.8	1,687.29	98	15.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Pool C original

Number of peaks found:	5	Corr. Area 1:	889.6
Noise:	0.1		

Peak table for sample 9 : Pool C original

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	666	476.65	1,083.6		90.23
3	1,397	1,020.24	1,106.5		97.67
4	1,515	213.75	213.8		98.41
5	1,669	732.42	665.1		99.37
6	6,854	4.19	0.9		109.59
7	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 9 : Pool C original

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	716	889.6	2,796.5	1,209.64	40	23.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

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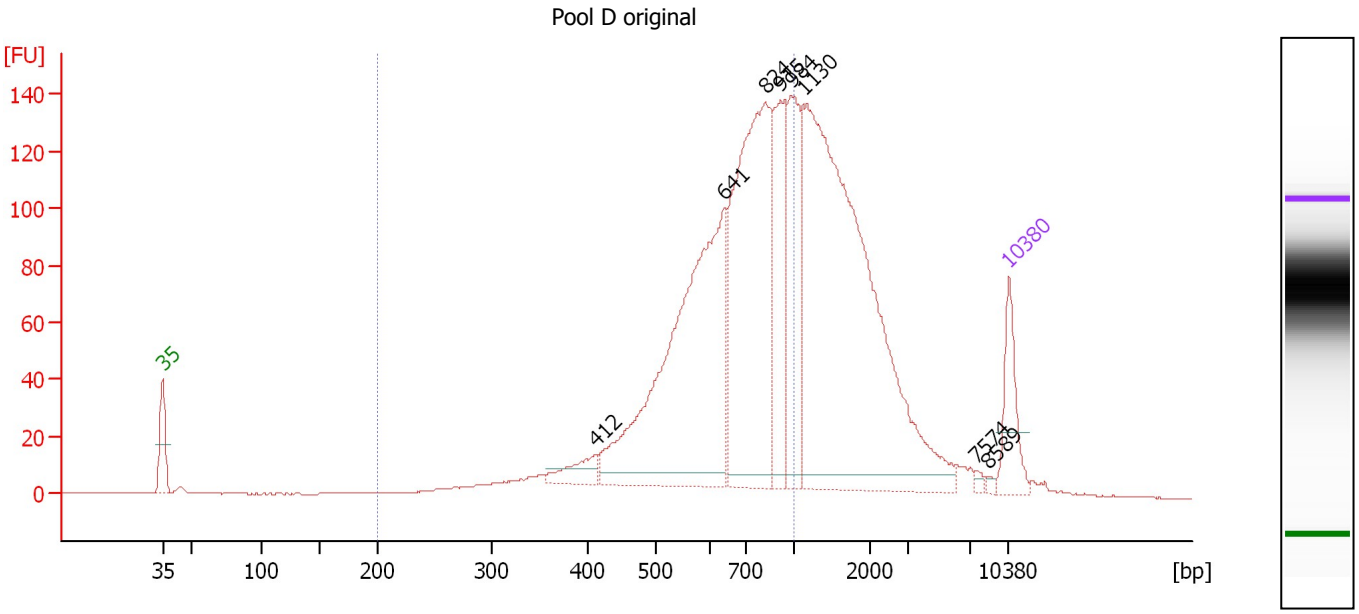
Modified: 12/6/2016 7:44:09 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Pool D original

Number of peaks found:	8	Corr. Area 1:	1,447.3
Noise:	0.1		

Peak table for sample 10 : Pool D original

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	412	49.17	180.7		78.88
3	641	732.19	1,731.8		89.46
4	824	602.55	1,107.8		92.87
5	915	208.73	345.6		94.06
6	984	221.46	340.9		94.97
7	1,130	1,015.42	1,361.3		96.00
8	7,574	5.99	1.2		110.33
9	8,589	4.61	0.8		111.29
10	10,380	75.00	10.9	Upper Marker	113.00

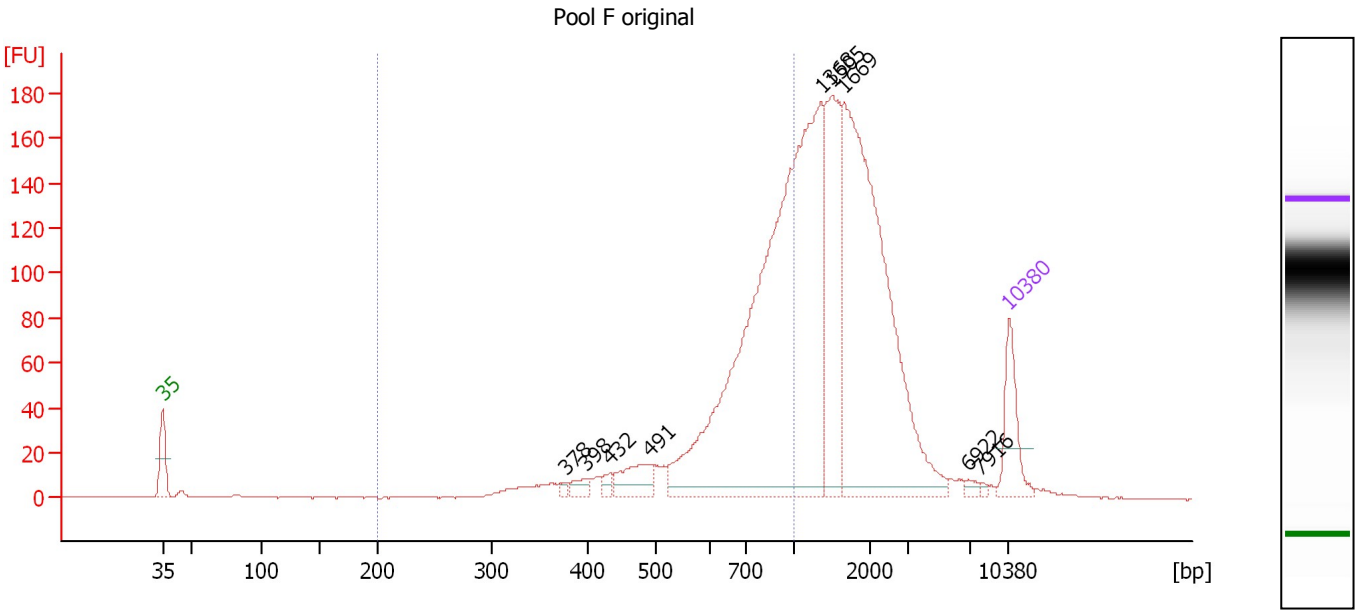
Region table for sample 10 : Pool D original

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	675	1,447.3	4,979.4	1,990.25	59	25.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Pool F original

Number of peaks found:	9	Corr. Area 1:	863.0
Noise:	0.1		

Peak table for sample 11 : Pool F original

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	378	7.86	31.5		76.43
3	398	19.50	74.2		78.03
4	432	12.53	43.9		79.97
5	491	67.06	207.0		83.24
6	1,368	1,156.14	1,280.5		97.49
7	1,505	260.67	262.5		98.35
8	1,669	740.76	672.4		99.38
9	6,922	7.95	1.7		109.68
10	7,916	4.00	0.8		110.65
11	10,380	75.00	10.9	Upper Marker	113.00

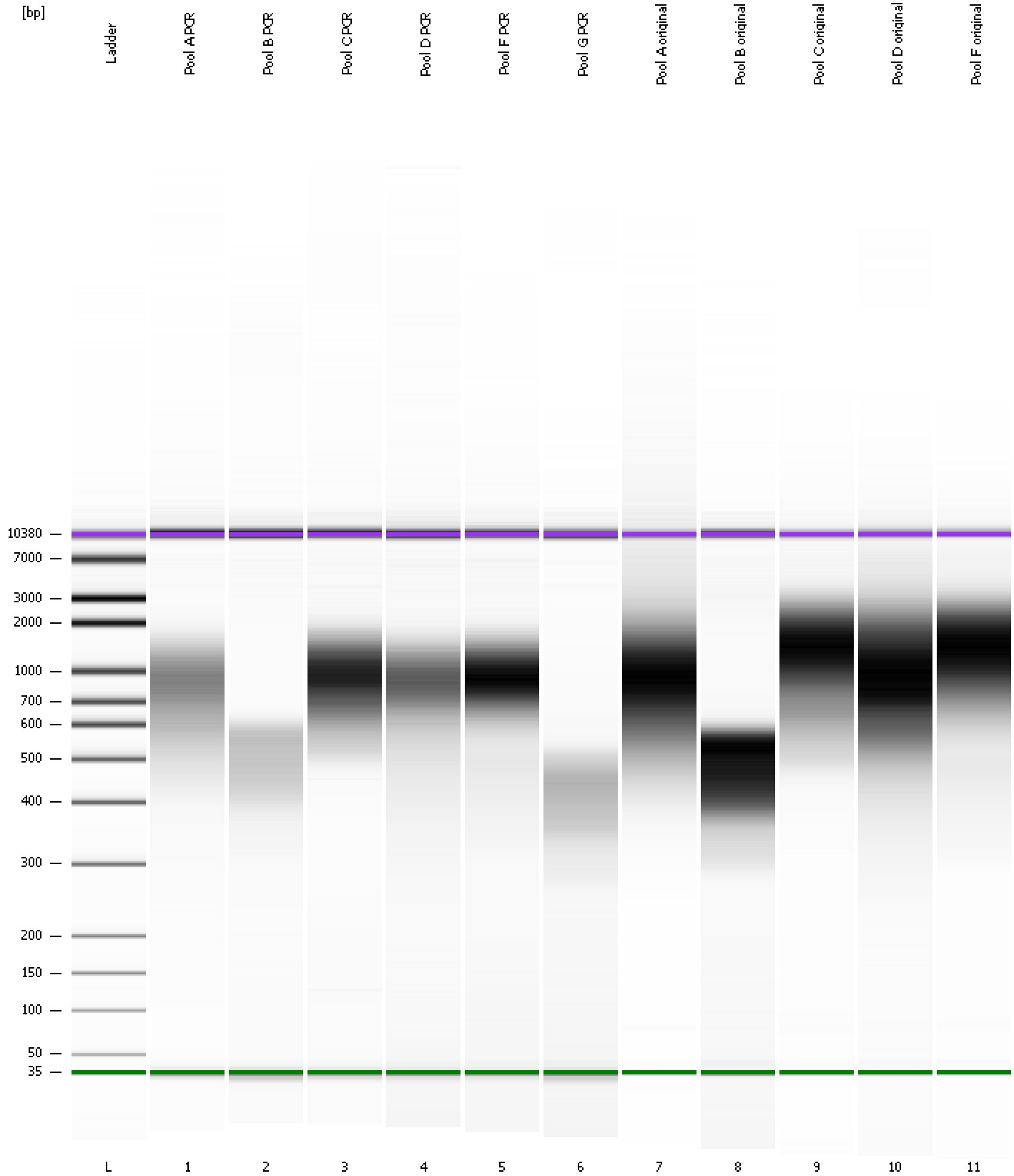
Region table for sample 11 : Pool F original

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	723	863.0	2,549.5	1,081.49	38	25.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad

Created: 12/6/2016 6:58:00 AM
Modified: 12/6/2016 7:44:09 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		12/6/2016 7:39:18 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-12-06\2016-12-06_001.xad)		Instrument	Run		12/6/2016 6:58:05 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/6/2016 6:58:05 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/6/2016 6:58:05 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/6/2016 6:58:05 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/6/2016 6:58:05 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/6/2016 6:58:05 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/6/2016 6:58:05 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1