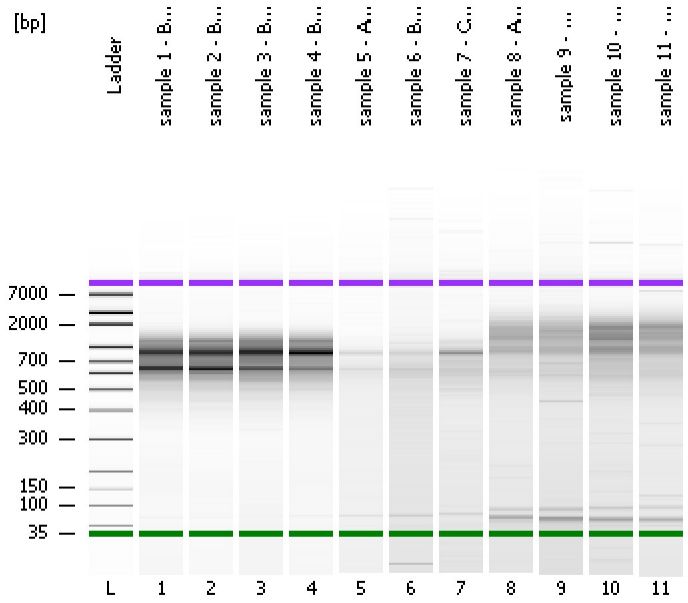
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

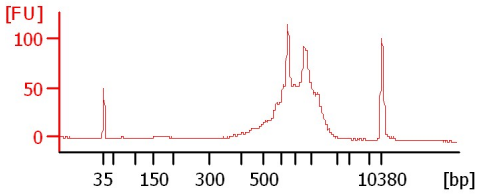
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

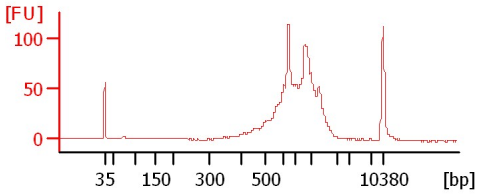
Chip Information:

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

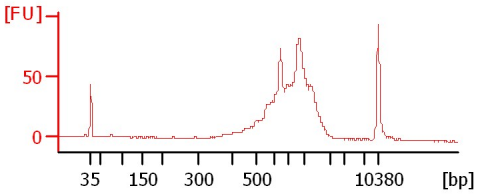
sample 1 - B1 SPsm



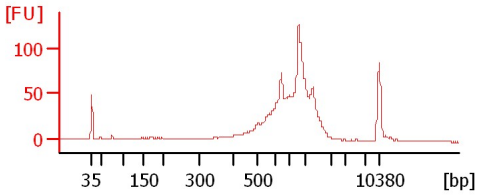
sample 2 - B2 SPsm



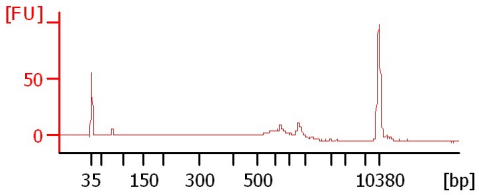
sample 3 - B4 SPsm



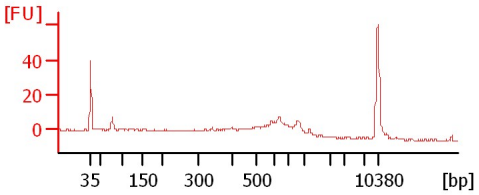
sample 4 - B6 SPsm



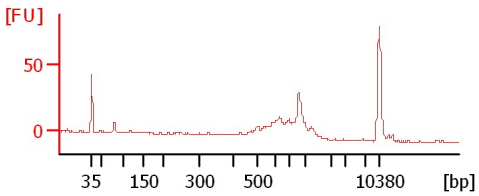
sample 5 - A7 SPp a0



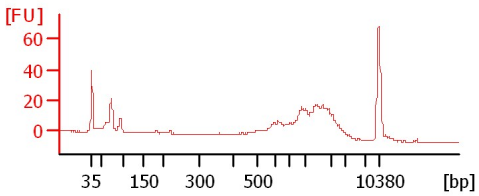
sample 6 - B8 SPp b1



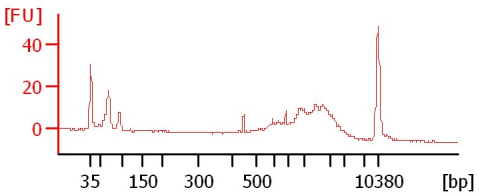
sample 7 - C9 SPp c20



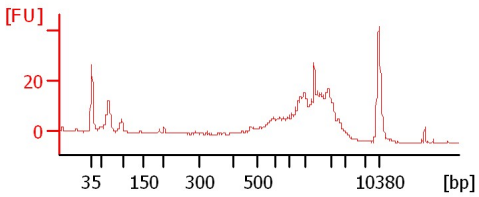
sample 8 - A11 C1t b0



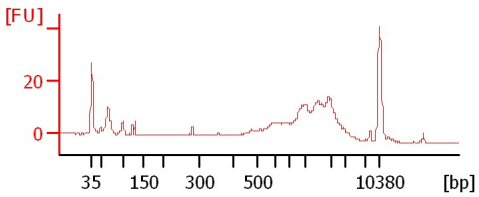
sample 9 - D11 C1t c1



sample 10 - E11 C1t b20



sample 11 - B12 C1t cG



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1 - B1 SPsm		☐	✔			
sample 2 - B2 SPsm		☐	✔			
sample 3 - B4 SPsm		☐	✔			
sample 4 - B6 SPsm		☐	✔			
sample 5 - A7 SPp a0		☐	✔			
sample 6 - B8 SPp b1		☐	✔			
sample 7 - C9 SPp c20		☐	✔			
sample 8 - A11 C1t b0		☐	✔			
sample 9 - D11 C1t c1		☐	✔			
sample 10 - E11 C1t b20		☐	✔			
sample 11 - B12 C1t cG		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 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

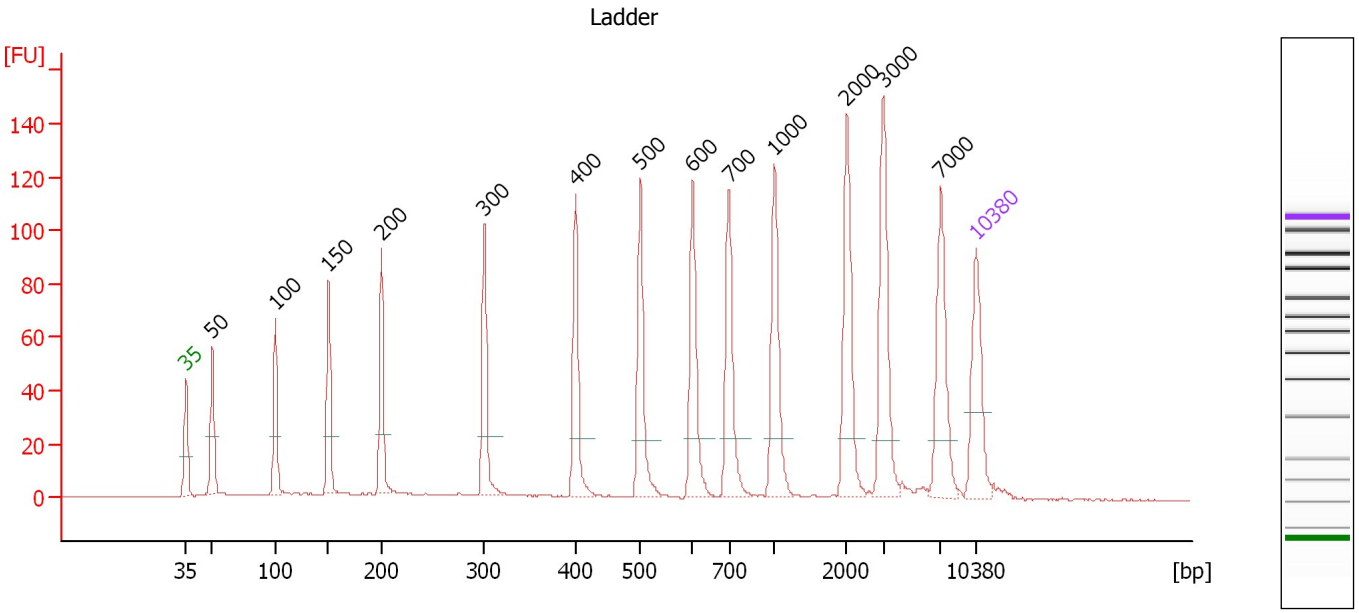
Ladder

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\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

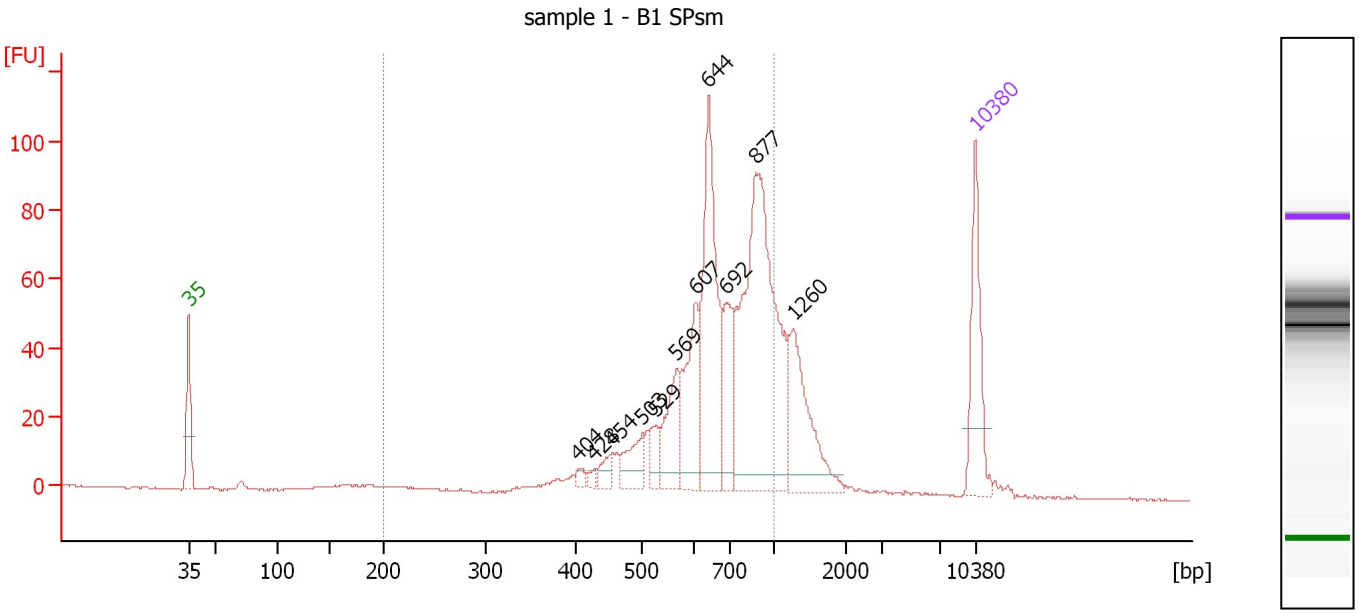
Peak table for Ladder

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	45.31
3		100	150.00	2,272.7	Ladder Peak	50.89
4		150	150.00	1,515.2	Ladder Peak	55.61
5		200	150.00	1,136.4	Ladder Peak	60.29
6		300	150.00	757.6	Ladder Peak	69.40
7		400	150.00	568.2	Ladder Peak	77.48
8		500	150.00	454.5	Ladder Peak	83.24
9		600	150.00	378.8	Ladder Peak	87.87
10		700	150.00	324.7	Ladder Peak	91.08
11		1,000	150.00	227.3	Ladder Peak	95.10
12		2,000	150.00	113.6	Ladder Peak	101.52
13		3,000	150.00	75.8	Ladder Peak	104.73
14		7,000	150.00	32.5	Ladder Peak	109.84
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1 - B1 SPsm

Number of peaks found:	11	Corr. Area 1:	799.4
Noise:	0.2		

Peak table for sample 1 : sample 1 - B1 SPsm

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	404	8.23	30.9		77.69
3	428	6.72	23.8		79.12
4	454	17.34	57.9		80.59
5	503	39.06	117.6		83.39
6	529	25.88	74.2		84.57
7	569	61.94	165.0		86.42
8	607	94.98	237.2		88.08
9	644	206.34	485.8		89.27
10	692	73.34	160.5		90.84
11	877	363.48	628.2		93.45
12	1,260	105.86	127.3		96.77
13	10,380	75.00	10.9	Upper Marker	113.00

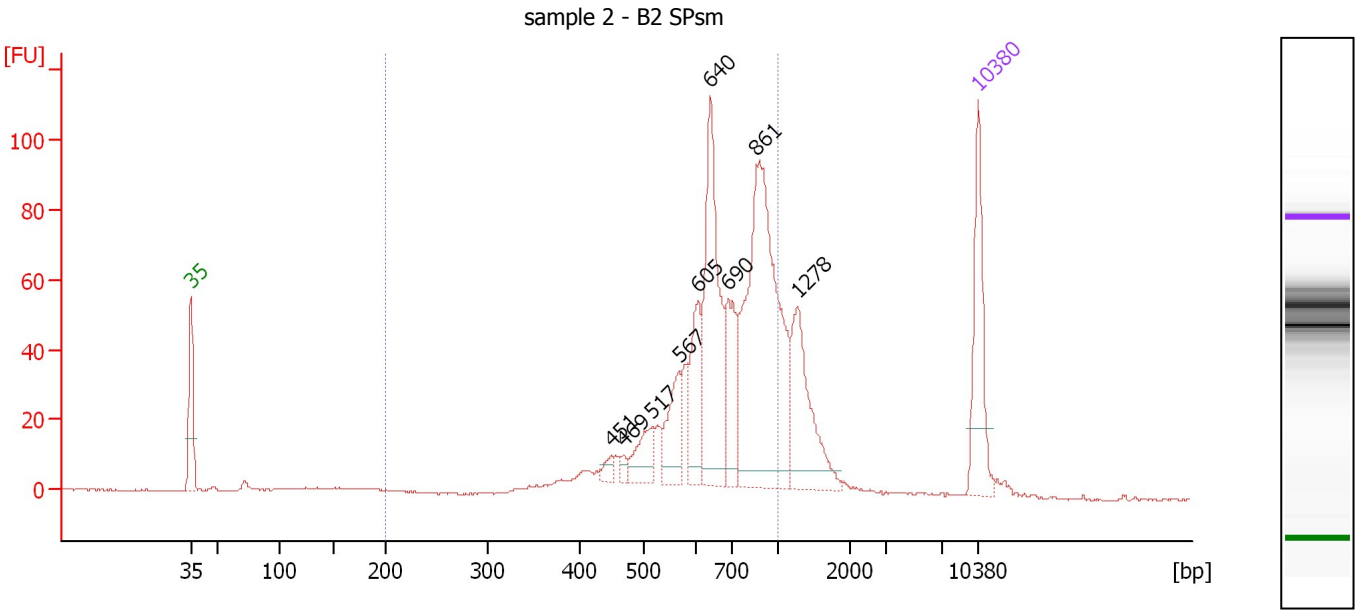
Region table for sample 1 : sample 1 - B1 SPsm

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	692	799.4	2,203.9	921.59	79	23.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2 - B2 SPsm

Number of peaks found:	9	Corr. Area 1:	797.4
Noise:	0.2		

Peak table for sample 2 : sample 2 - B2 SPsm

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	451	10.79	36.3		80.39
3	469	6.59	21.3		81.44
4	517	37.35	109.4		84.04
5	567	53.31	142.4		86.36
6	605	65.25	163.5		88.02
7	640	186.09	440.5		89.16
8	690	65.87	144.6		90.77
9	861	334.87	589.4		93.24
10	1,278	101.32	120.1		96.89
11	10,380	75.00	10.9	Upper Marker	113.00

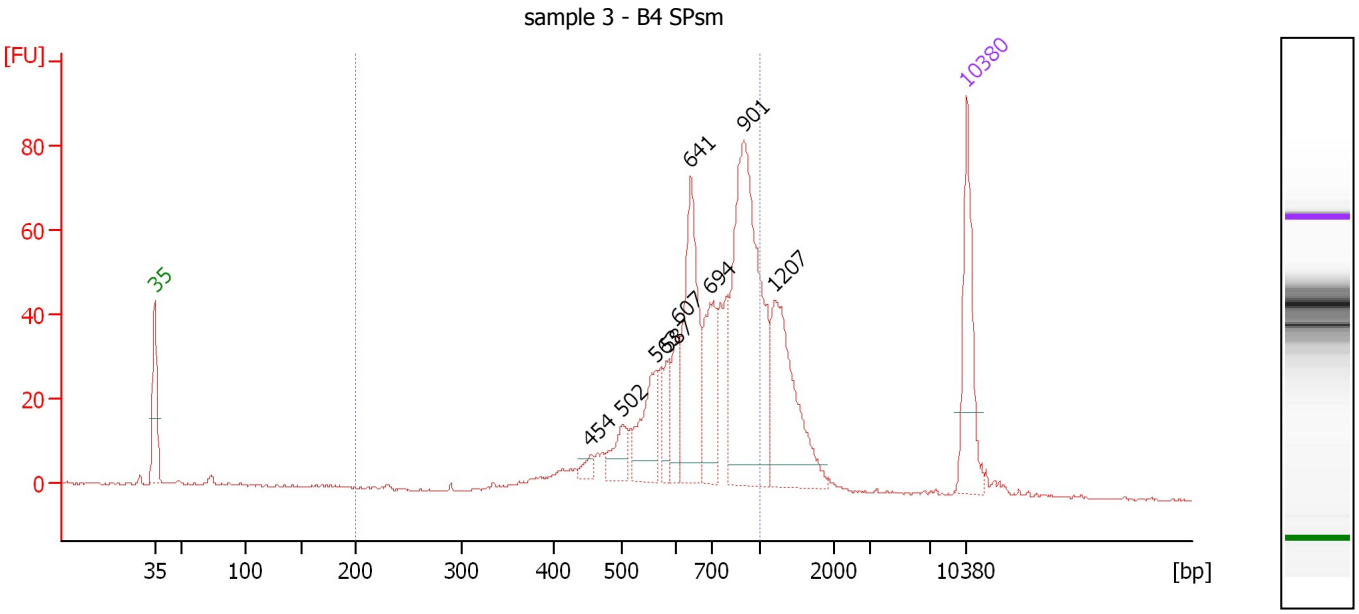
Region table for sample 2 : sample 2 - B2 SPsm

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	693	797.4	2,025.8	857.11	78	22.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3 - B4 SPsm

Number of peaks found:	9	Corr. Area 1:	632.4
Noise:	0.3		

Peak table for sample 3 : sample 3 - B4 SPsm

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	454	10.09	33.7		80.58
3	502	33.03	99.7		83.32
4	563	66.61	179.2		86.17
5	587	28.23	72.9		87.27
6	607	41.22	102.9		88.09
7	641	139.71	330.0		89.20
8	694	75.42	164.7		90.89
9	901	280.77	472.0		93.78
10	1,207	127.13	159.6		96.43
11	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 3 : sample 3 - B4 SPsm

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	701	632.4	1,894.2	809.72	75	23.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

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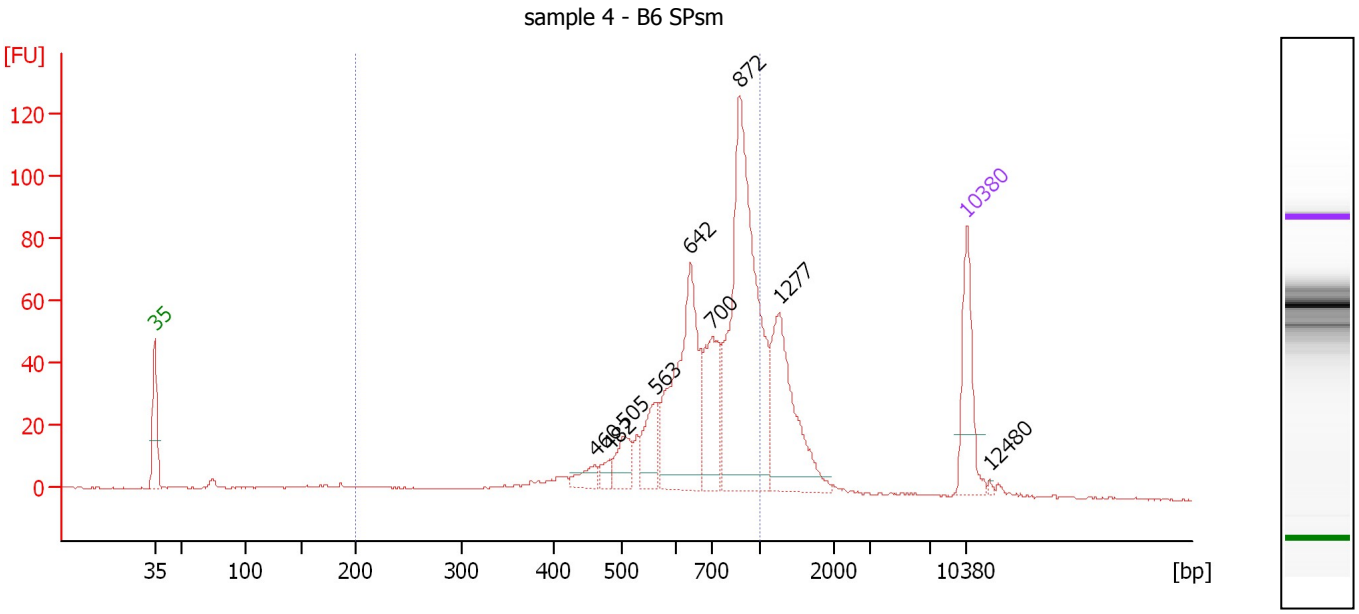


Overall Results for sample 4 : sample 4 - B6 SPsm

Number of peaks found:	9	Corr. Area 1:	749.3
Noise:	0.2		

Peak table for sample 4 : sample 4 - B6 SPsm

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	460	21.40	70.5		80.95
3	482	14.02	44.0		82.23
4	505	40.67	122.1		83.46
5	563	58.67	157.9		86.16
6	642	233.87	552.3		89.21
7	700	100.08	216.7		91.08
8	872	405.88	705.2		93.39
9	1,277	154.56	183.4		96.88
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,480	0.00	0.0		114.97

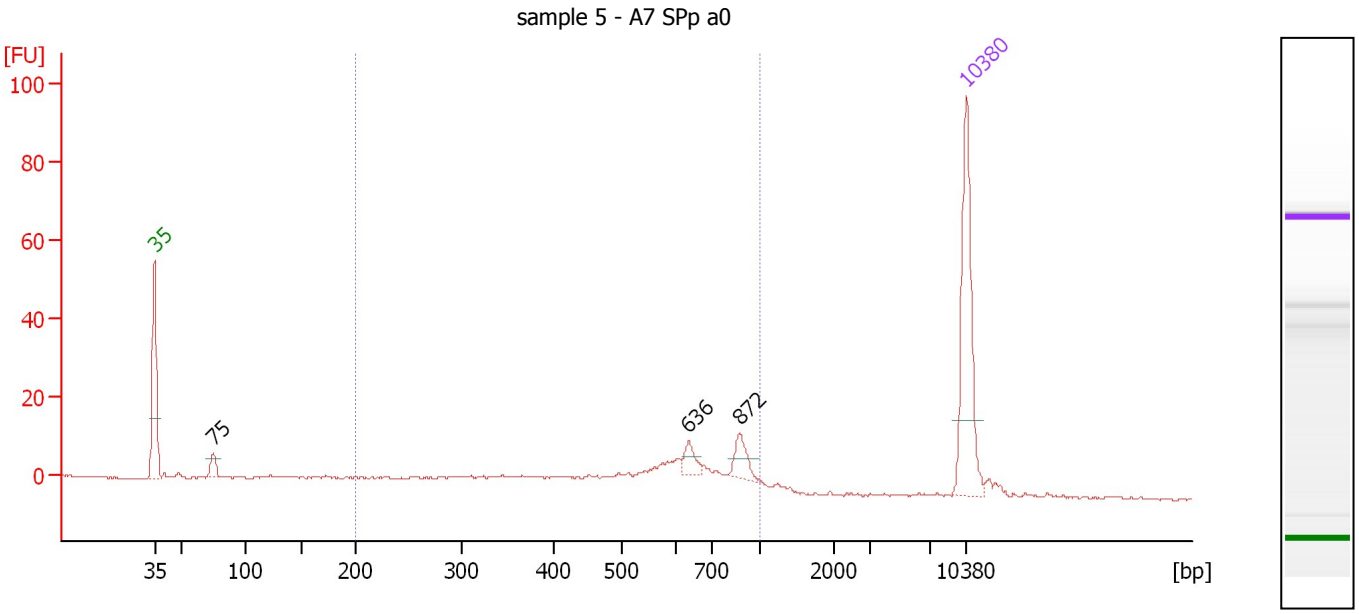
Region table for sample 4 : sample 4 - B6 SPsm

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	707	749.3	2,279.9	950.29	75	24.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5 - A7 SPp a0

Number of peaks found:	3	Corr. Area 1:	145.4
Noise:	0.2		

Peak table for sample 5 : sample 5 - A7 SPp a0

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		75	13.15	267.2		48.05
3		636	11.42	27.2		89.03
4		872	15.35	26.7		93.39
5	▶	10,380	75.00	10.9	Upper Marker	113.00

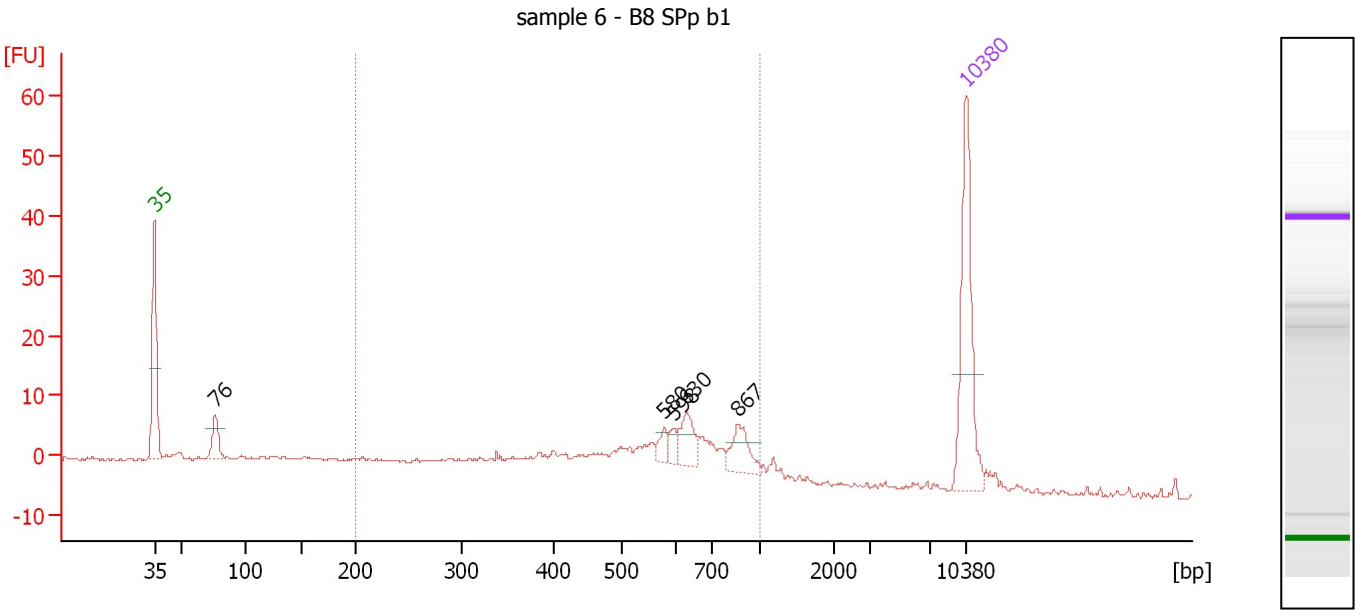
Region table for sample 5 : sample 5 - A7 SPp a0

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	566	145.4	594.5	175.24	77	36.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6 - B8 SPp b1

Number of peaks found:	5	Corr. Area 1:	149.4
Noise:	0.2		

Peak table for sample 6 : sample 6 - B8 SPp b1

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	76	23.24	461.2		48.25
3	580	8.76	22.9		86.95
4	598	7.21	18.3		87.76
5	630	22.12	53.2		88.83
6	867	23.16	40.5		93.32
7	10,380	75.00	10.9	Upper Marker	113.00

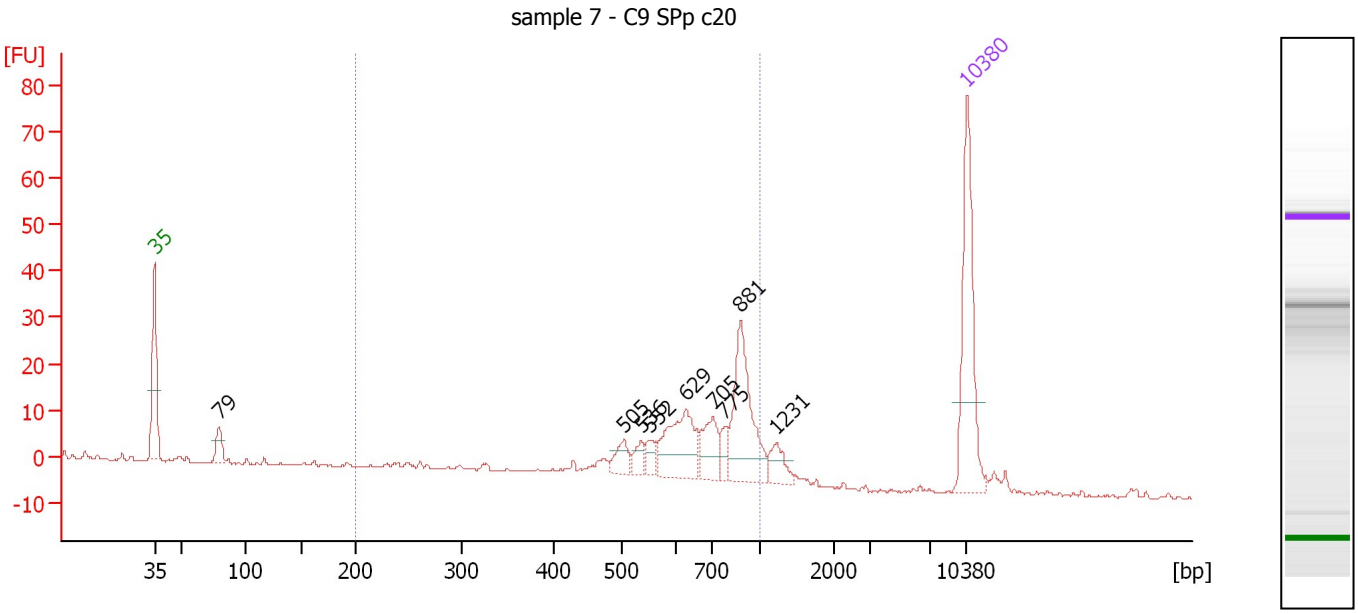
Region table for sample 6 : sample 6 - B8 SPp b1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	555	149.4	871.2	260.06	74	34.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7 - C9 SPp c20

Number of peaks found:	9	Corr. Area 1:	195.0
Noise:	0.3		

Peak table for sample 7 : sample 7 - C9 SPp c20

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	79	18.92	361.0		48.59
3	505	14.07	42.2		83.46
4	536	10.15	28.7		84.93
5	552	9.78	26.8		85.66
6	629	55.21	133.0		88.80
7	705	26.65	57.3		91.15
8	775	11.17	21.8		92.09
9	881	75.90	130.6		93.50
10	1,231	15.13	18.6		96.58
11	10,380	75.00	10.9	Upper Marker	113.00

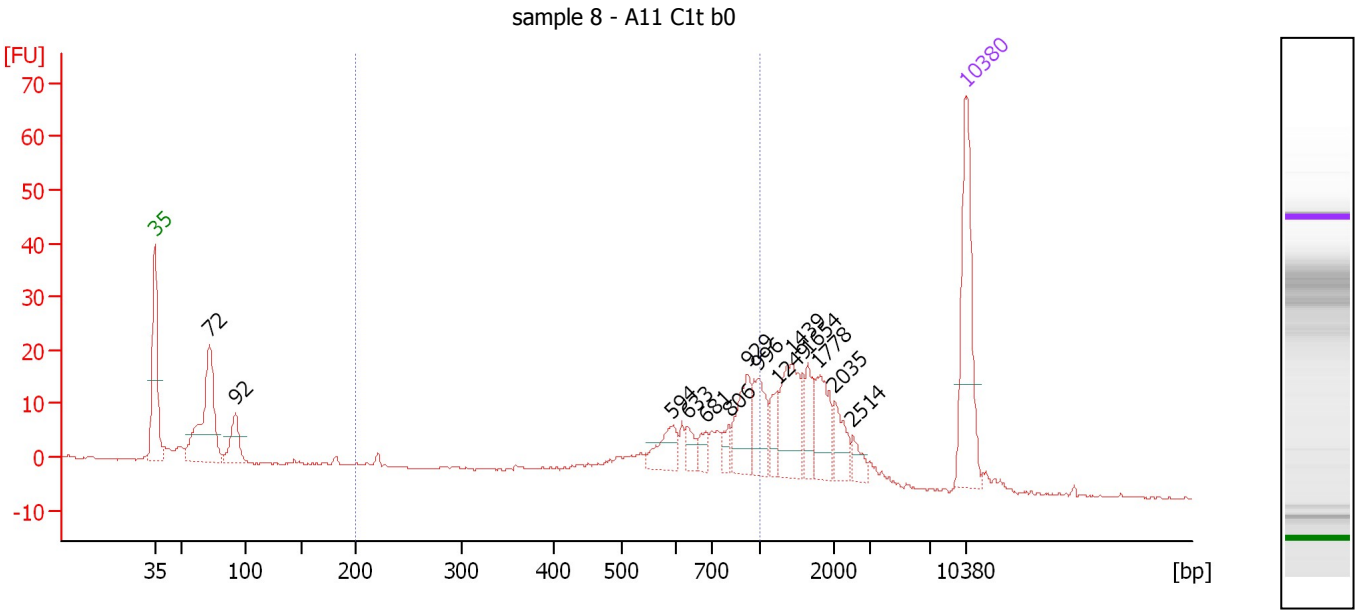
Region table for sample 7 : sample 7 - C9 SPp c20

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	674	195.0	661.5	252.56	80	27.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8 - A11 C1t b0

Number of peaks found:	14	Corr. Area 1:	147.5
Noise:	0.2		

Peak table for sample 8 : sample 8 - A11 C1t b0

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	72	127.34	2,693.2		47.73
3	92	36.76	607.7		49.96
4	594	25.86	65.9		87.61
5	633	11.29	27.0		88.94
6	681	11.00	24.5		90.48
7	806	10.13	19.0		92.50
8	929	37.05	60.4		94.15
9	996	31.88	48.5		95.05
10	1,249	15.97	19.4		96.69
11	1,439	51.55	54.3		97.92
12	1,654	21.71	19.9		99.30
13	1,778	32.32	27.5		100.09
14	2,035	19.94	14.8		101.63
15	2,514	9.34	5.6		103.17
16	10,380	75.00	10.9	Upper Marker	113.00

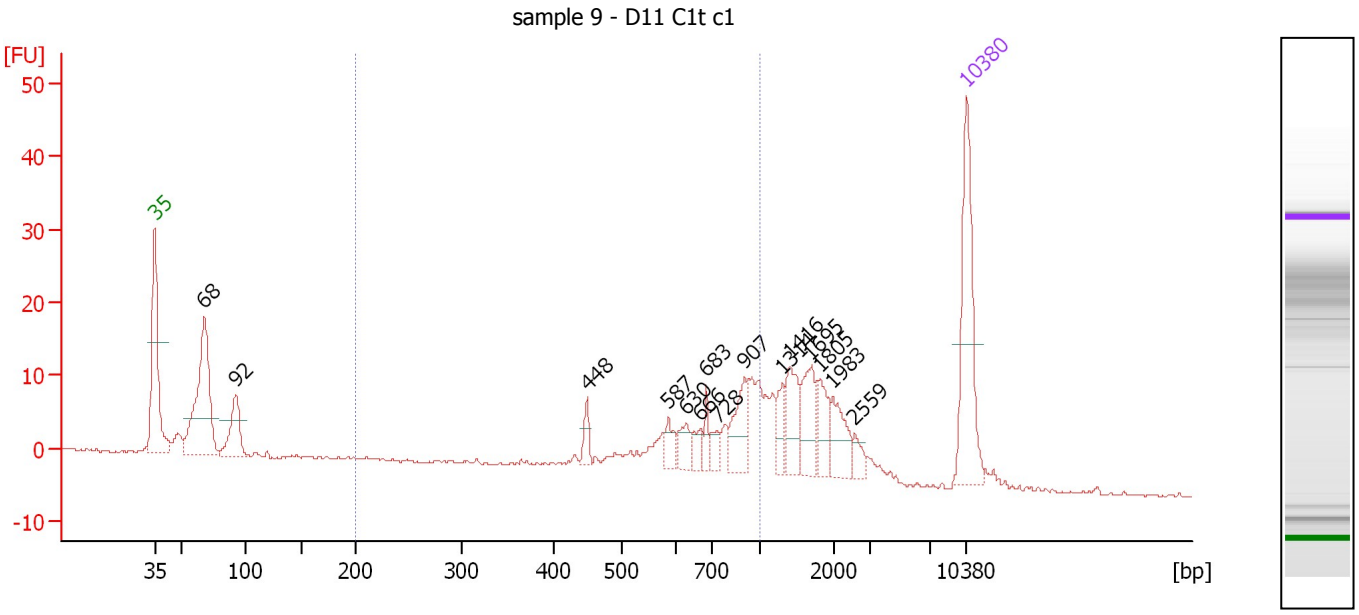
Region table for sample 8 : sample 8 - A11 C1t b0

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	677	147.5	601.3	223.47	37	29.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9 - D11 C1t c1

Number of peaks found:	15	Corr. Area 1:	108.3
Noise:	0.1		

Peak table for sample 9 : sample 9 - D11 C1t c1

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	68	149.76	3,347.6		47.30
3	92	48.10	794.8		49.96
4	448	12.42	42.0		80.26
5	587	12.43	32.1		87.27
6	630	14.25	34.3		88.85
7	666	10.89	24.8		89.99
8	683	11.38	25.2		90.54
9	728	9.58	19.9		91.46
10	907	31.62	52.8		93.85
11	1,314	14.56	16.8		97.12
12	1,416	30.94	33.1		97.77
13	1,695	31.16	27.8		99.57
14	1,805	20.53	17.2		100.27
15	1,983	25.91	19.8		101.41
16	2,559	8.64	5.1		103.32
17	10,380	75.00	10.9	Upper Marker	113.00

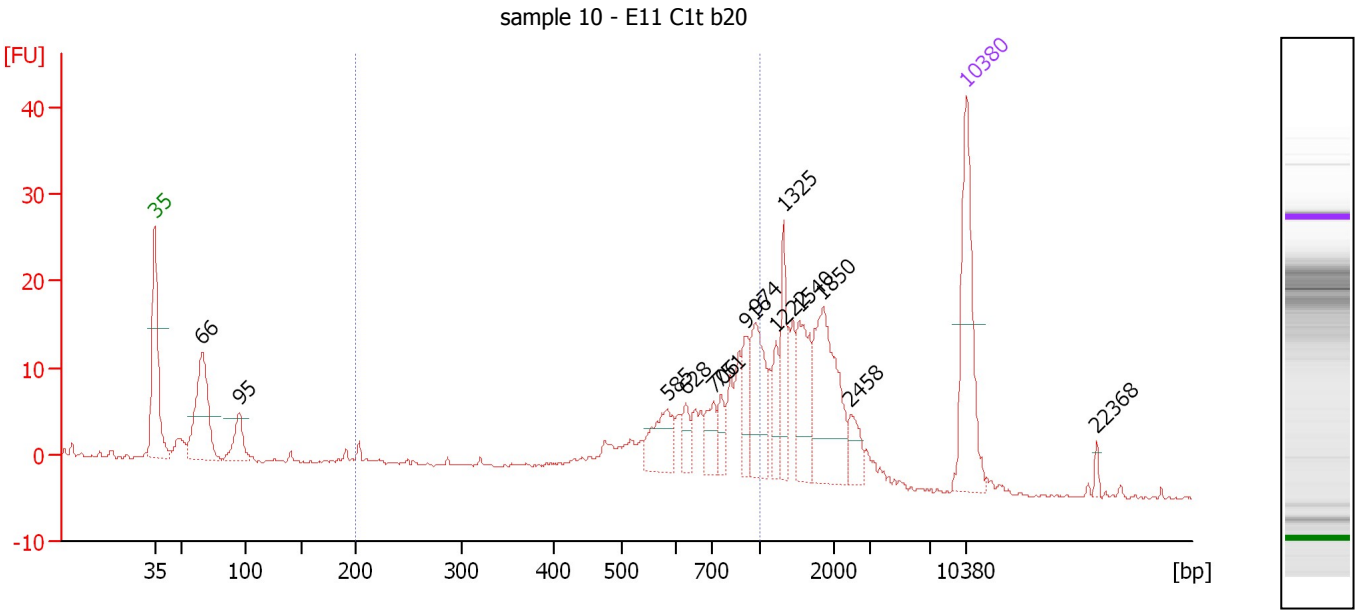
Region table for sample 9 : sample 9 - D11 C1t c1

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	670	108.3	602.6	225.12	37	29.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10 - E11 C1t b20

Number of peaks found:	14	Corr. Area 1:	134.0
Noise:	0.1		

Peak table for sample 10 : sample 10 - E11 C1t b20

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	66	109.19	2,508.8		47.09
3	95	35.29	564.5		50.30
4	585	37.30	96.6		87.18
5	628	13.48	32.5		88.78
6	706	20.75	44.6		91.16
7	751	14.62	29.5		91.77
8	916	24.64	40.7		93.98
9	974	53.06	82.5		94.75
10	1,222	20.83	25.8		96.52
11	1,325	32.26	36.9		97.19
12	1,540	45.16	44.4		98.57
13	1,850	81.06	66.4		100.56
14	2,458	15.61	9.6		102.99
15	10,380	75.00	10.9	Upper Marker	113.00
16	22,368	0.00	0.0		124.22

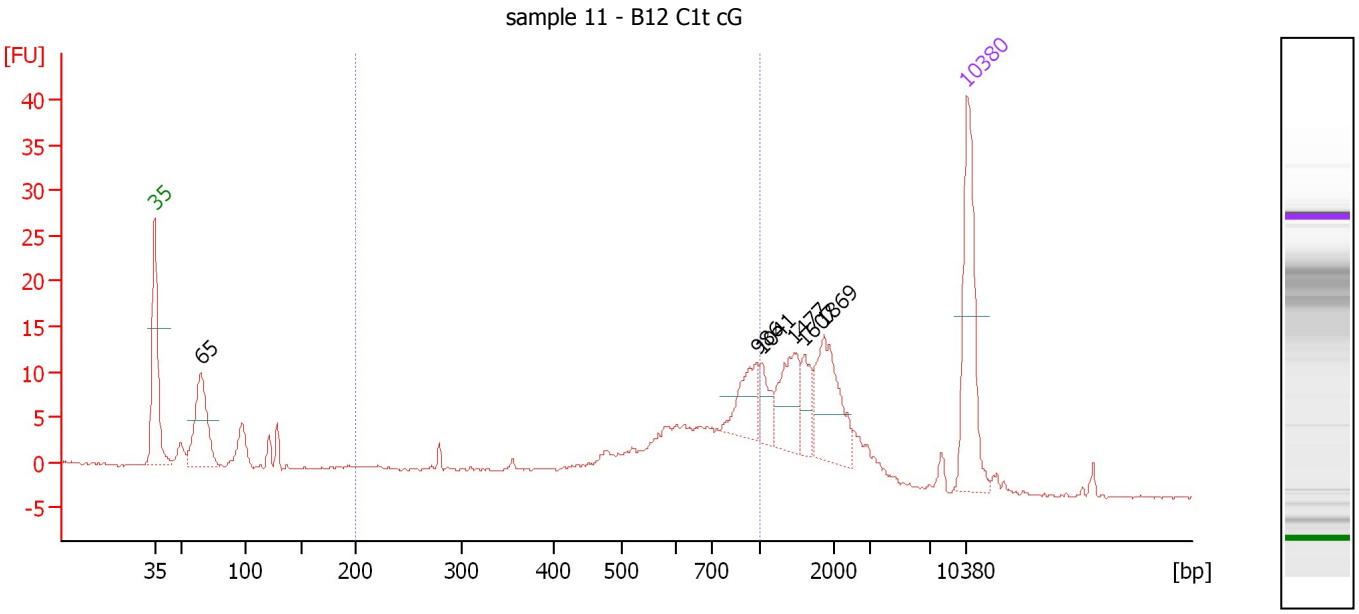
Region table for sample 10 : sample 10 - E11 C1t b20

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	671	134.0	859.3	312.67	41	30.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11 - B12 C1t cG

Number of peaks found:	6	Corr. Area 1:	101.9
Noise:	0.1		

Peak table for sample 11 : sample 11 - B12 C1t cG

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	65	91.59	2,138.1		46.98
3	986	33.95	52.2		94.91
4	1,041	15.75	22.9		95.36
5	1,477	40.73	41.8		98.16
6	1,607	21.00	19.8		99.00
7	1,869	58.97	47.8		100.68
8	10,380	75.00	10.9	Upper Marker	113.00

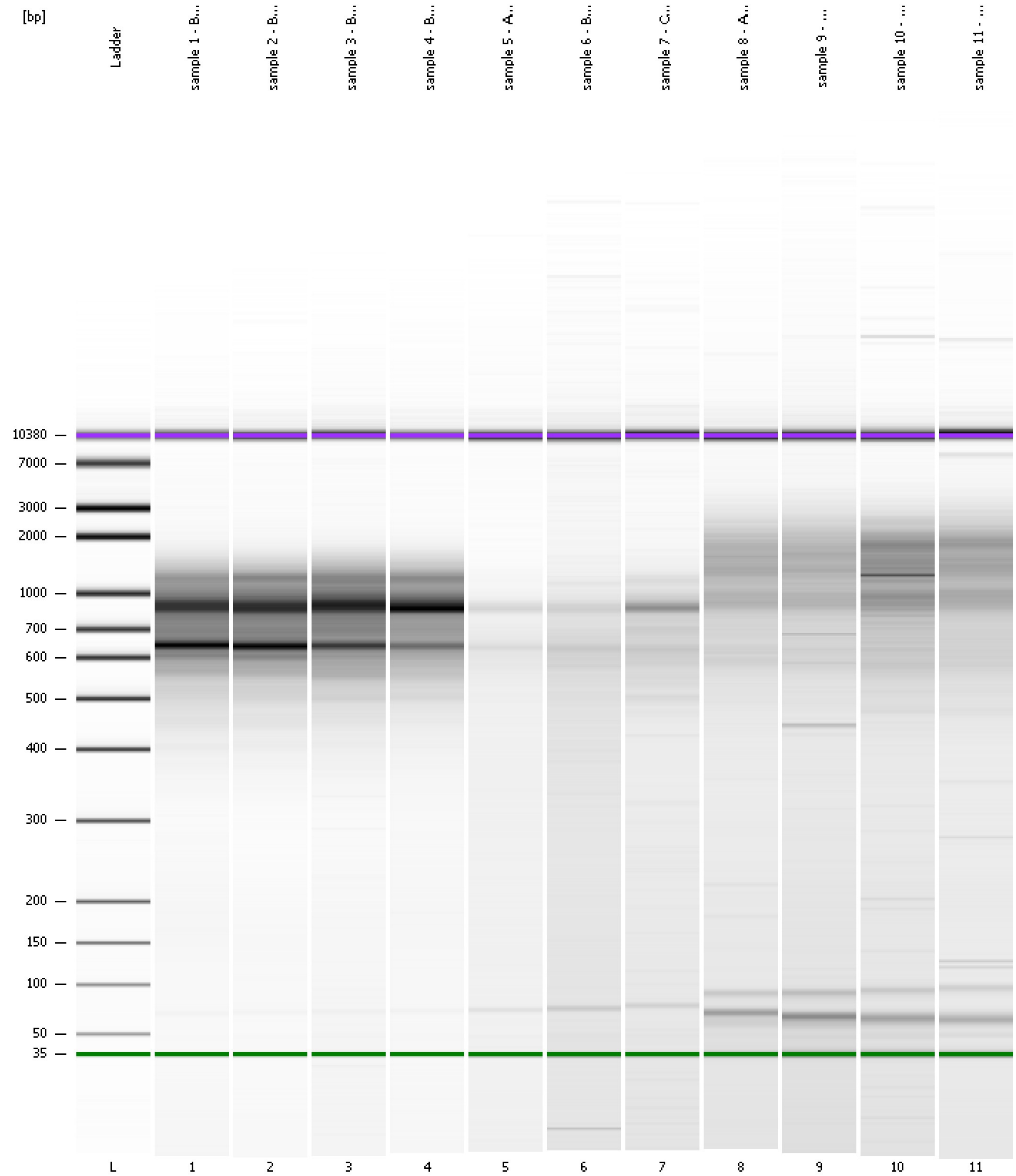
Region table for sample 11 : sample 11 - B12 C1t cG

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	661	101.9	682.8	246.95	40	30.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad

Created: 6/2/2016 10:39:07 AM
Modified: 6/2/2016 11:20:25 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		6/2/2016 11:20:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-06-02\2016-06-02_001.xad)		Instrument	Run		6/2/2016 10:39:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/2/2016 10:39:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/2/2016 10:39:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/2/2016 10:39:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/2/2016 10:39:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/2/2016 10:39:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/2/2016 10:39:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1