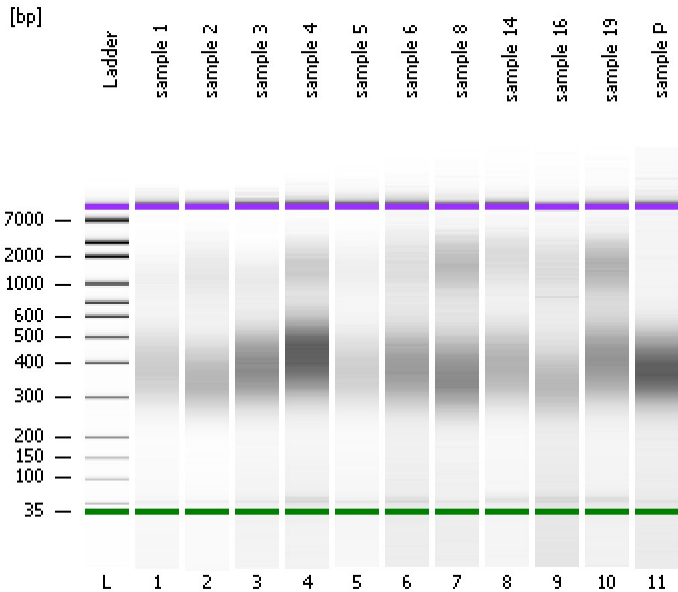


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

Created: 12/12/2017 3:55:27 PM
Modified: 12/12/2017 4:38:12 PM

Electrophoresis File Run Summary



Instrument Information:

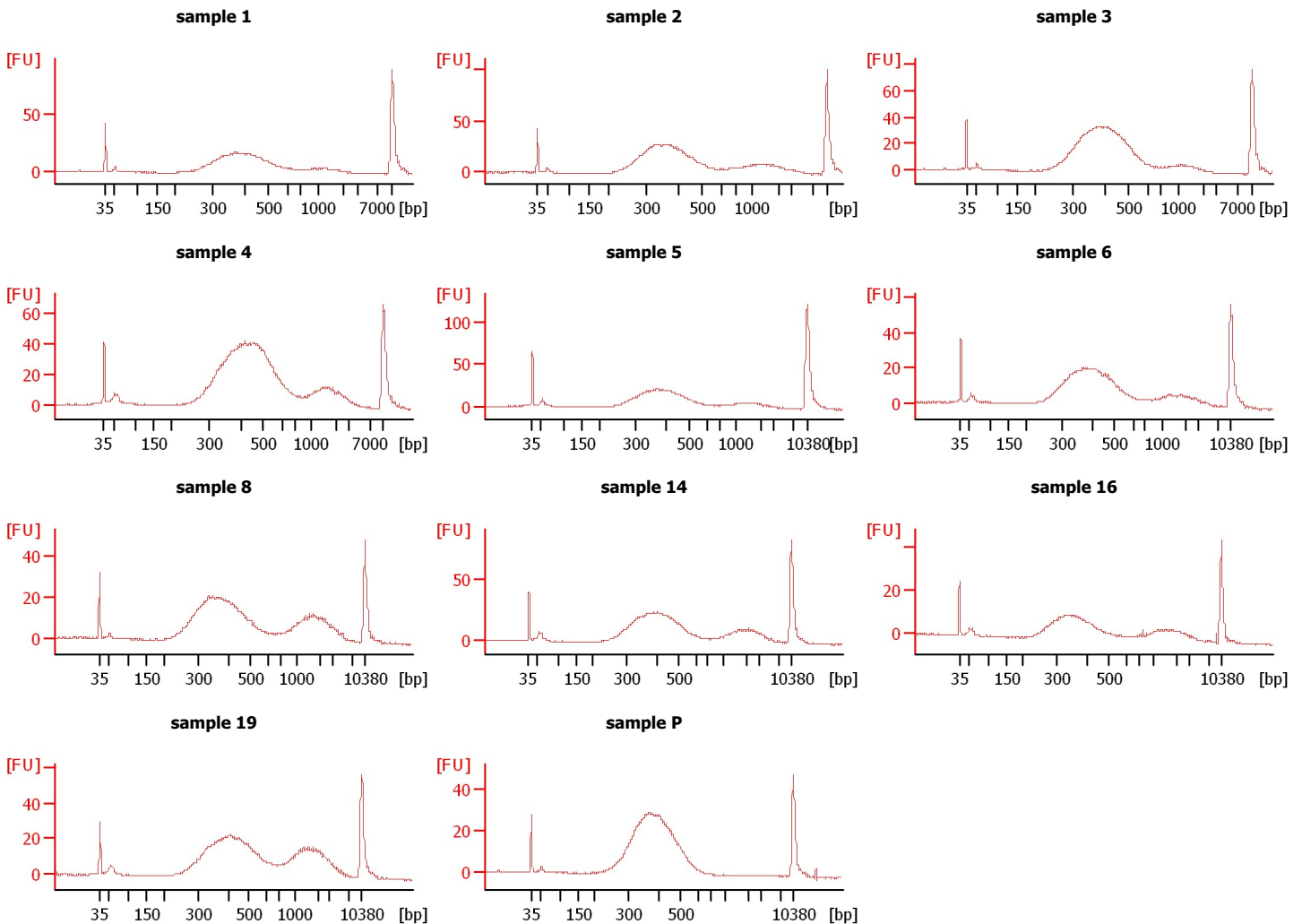
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

Created: 12/12/2017 3:55:27 PM
 Modified: 12/12/2017 4:38:12 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
sample 8		<input type="checkbox"/>	✓			
sample 14		<input type="checkbox"/>	✓			
sample 16		<input type="checkbox"/>	✓			
sample 19		<input type="checkbox"/>	✓			
sample P		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

Created: 12/12/2017 3:55:27 PM
Modified: 12/12/2017 4:38:12 PM

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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

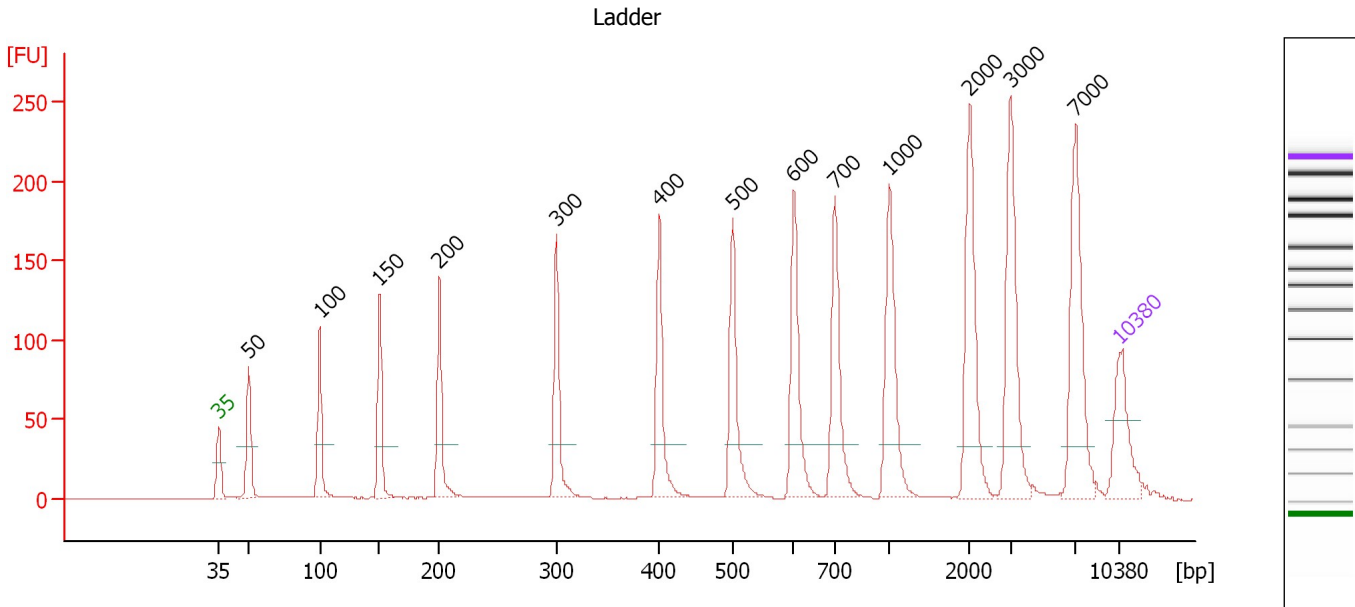
Ladder

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\2017-12-12\2017-12-12_002.xad

Created: 12/12/2017 3:55:27 PM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

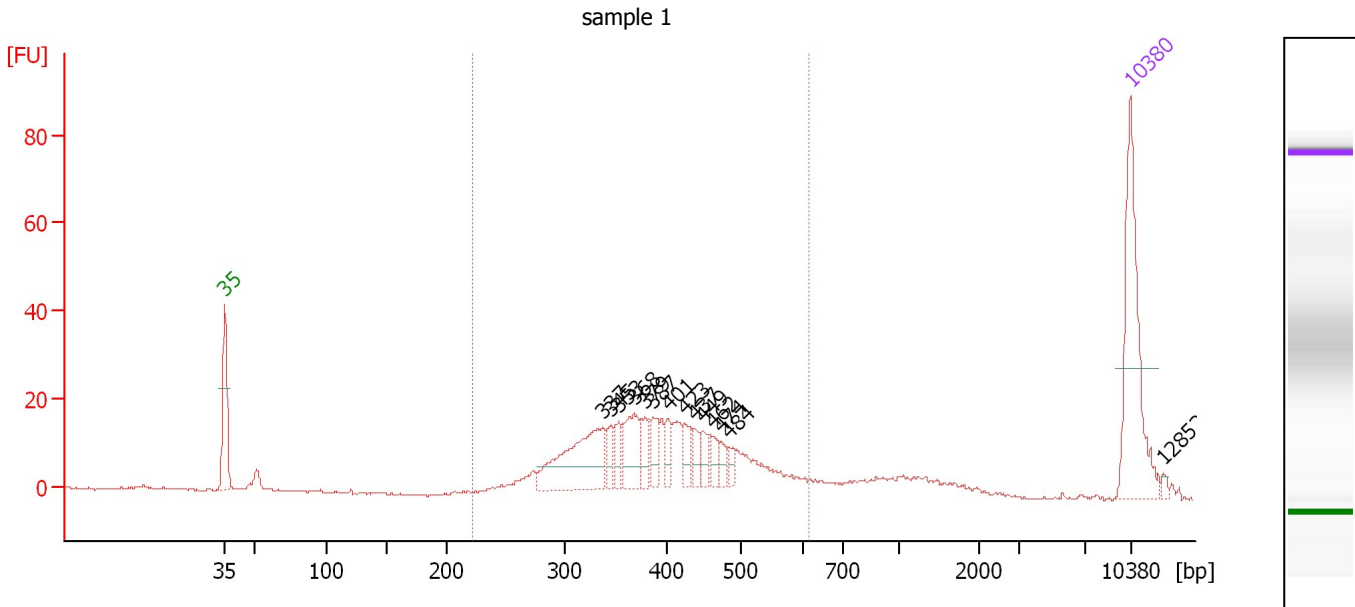
Peak table for Ladder

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	45.32
3	100	150.00	2,272.7	Ladder Peak	50.83
4	150	150.00	1,515.2	Ladder Peak	55.47
5	200	150.00	1,136.4	Ladder Peak	60.11
6	300	150.00	757.6	Ladder Peak	69.22
7	400	150.00	568.2	Ladder Peak	77.21
8	500	150.00	454.5	Ladder Peak	82.89
9	600	150.00	378.8	Ladder Peak	87.65
10	700	150.00	324.7	Ladder Peak	90.84
11	1,000	150.00	227.3	Ladder Peak	95.07
12	2,000	150.00	113.6	Ladder Peak	101.32
13	3,000	150.00	75.8	Ladder Peak	104.47
14	7,000	150.00	32.5	Ladder Peak	109.56
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 14 Corr. Area 1: 347.3
 Noise: 0.2

Peak table for sample 1 : sample 1

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	337	87.93	395.2		72.19
3	345	13.85	60.8		72.85
4	353	13.31	57.2		73.42
5	368	36.21	149.3		74.62
6	379	13.34	53.3		75.53
7	387	15.11	59.2		76.14
8	401	12.14	45.9		77.26
9	423	13.64	48.9		78.49
10	437	10.85	37.6		79.32
11	449	10.92	36.9		79.98
12	462	8.42	27.6		80.72
13	474	7.95	25.4		81.42
14	484	6.95	21.7		82.00
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,852	0.00	0.0		115.51

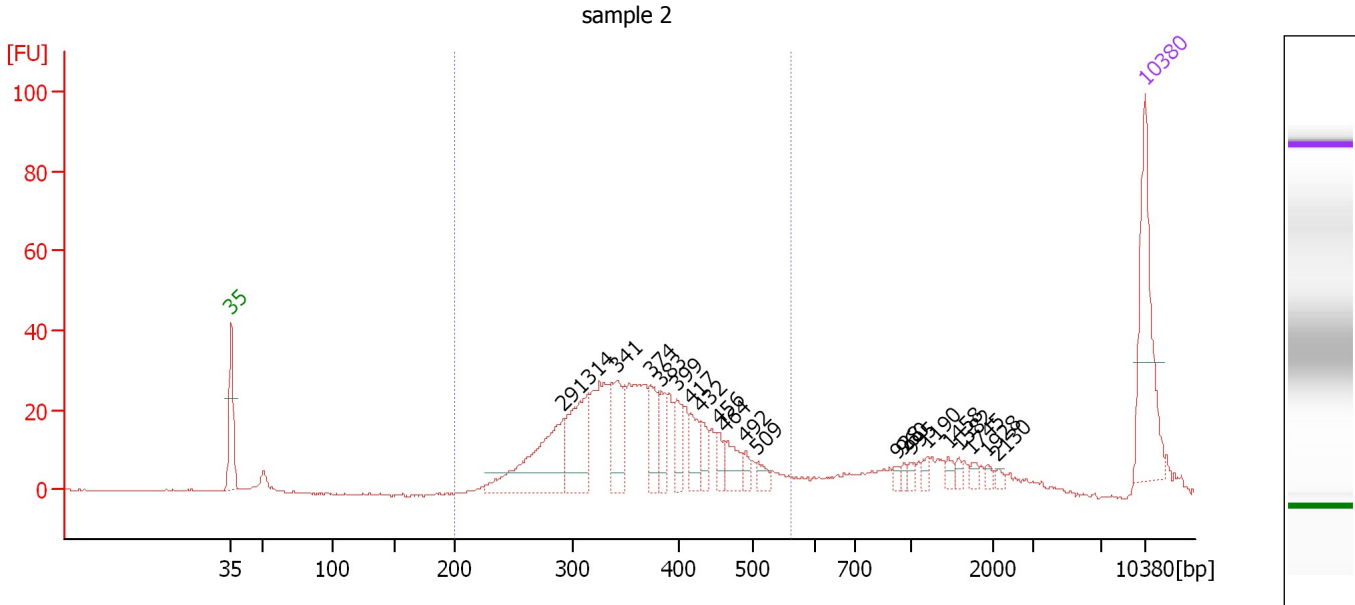
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
223	615	398	347.3	399.56	1,608.6	83	20.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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 Modified: 12/12/2017 4:38:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 21 Corr. Area 1: 516.2
 Noise: 0.2

Peak table for sample 2 : sample 2

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	291	116.28	605.4		68.40
3	314	80.93	390.1		70.36
4	341	56.63	251.3		72.53
5	374	33.48	135.8		75.10
6	383	24.22	95.9		75.84
7	399	25.71	97.6		77.14
8	417	24.65	89.6		78.16
9	432	16.37	57.4		79.02
10	456	12.53	41.7		80.37
11	464	23.96	78.3		80.82
12	492	7.29	22.5		82.41
13	509	9.75	29.0		83.31
14	928	3.85	6.3		94.05
15	960	3.78	6.0		94.50
16	995	4.20	6.4		94.99
17	1,190	5.08	6.5		96.26
18	1,458	5.47	5.7		97.93
19	1,582	3.82	3.7		98.71
20	1,745	4.98	4.3		99.73
21	1,928	3.59	2.8		100.87
22	2,130	3.18	2.3		101.73
23	10,380	75.00	10.9	Upper Marker	113.00


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

Created: 12/12/2017 3:55:27 PM
Modified: 12/12/2017 4:38:12 PM

Electropherogram Summary Continued ...

... Region table for sample 2 :

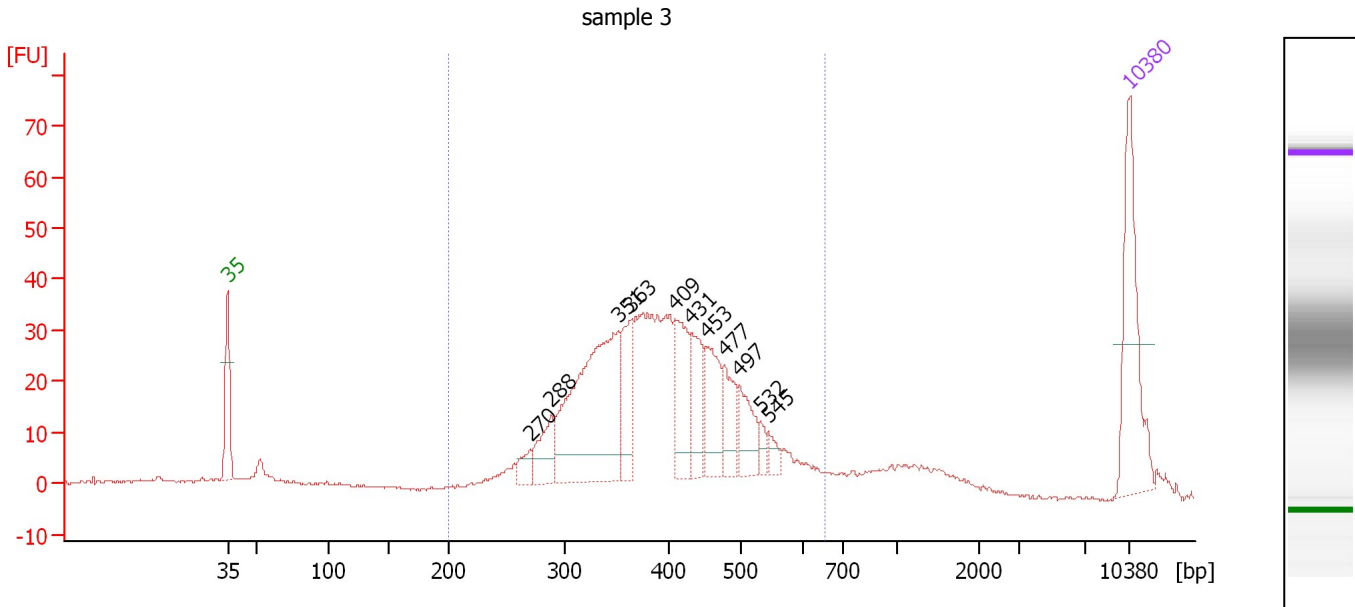
sample 2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/ μ l]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	561	365	516.2	660.73	2,878.2	 82	18.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 11 Corr. Area 1: 689.8
 Noise: 0.2

Peak table for sample 3 : sample 3

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	270	15.44	86.6		66.49
3	288	36.03	189.5		68.14
4	351	215.84	930.9		73.32
5	363	48.16	200.9		74.27
6	409	62.14	229.9		77.75
7	431	47.93	168.3		78.99
8	453	49.39	165.3		80.20
9	477	33.10	105.1		81.60
10	497	34.41	104.9		82.72
11	532	8.76	24.9		84.42
12	545	9.01	25.0		85.04
13	10,380	75.00	10.9	Upper Marker	113.00

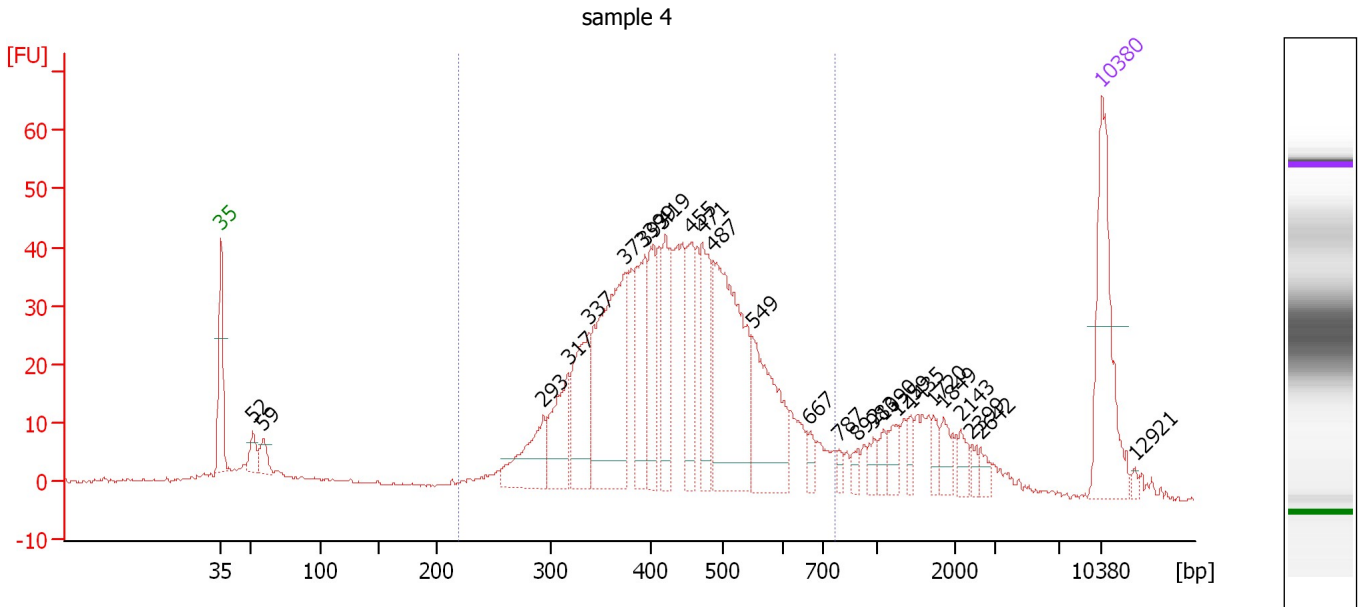
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	654	400	689.8	878.91	3,529.9	88	20.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 26 Corr. Area 1: 899.1
 Noise: 0.2

Peak table for sample 4 : sample 4

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	52	17.44	511.7		45.50
3	59	17.67	451.3		46.35
4	293	56.56	292.3		68.59
5	317	58.23	278.3		70.58
6	337	77.85	349.8		72.19
7	373	163.34	663.0		75.08
8	393	70.09	269.9		76.69
9	399	48.79	185.4		77.11
10	419	58.37	211.0		78.30
11	455	50.73	169.0		80.33
12	471	60.27	194.0		81.22
13	487	163.47	508.5		82.15
14	549	89.40	246.9		85.20
15	667	8.12	18.5		89.78
16	787	5.25	10.1		92.07
17	892	6.84	11.6		93.55
18	983	7.59	11.7		94.82
19	1,090	8.44	11.7		95.63
20	1,259	12.60	15.2		96.69
21	1,435	7.81	8.2		97.79
22	1,720	9.43	8.3		99.57
23	1,849	11.57	9.5		100.37
24	2,143	8.91	6.3		101.77
25	2,399	5.32	3.4		102.58

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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 Modified: 12/12/2017 4:38:12 PM

Electropherogram Summary Continued ...

... Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,642	6.20	3.6		103.34
27	10,380	75.00	10.9	Upper Marker	113.00
28	12,921	0.00	0.0		115.58

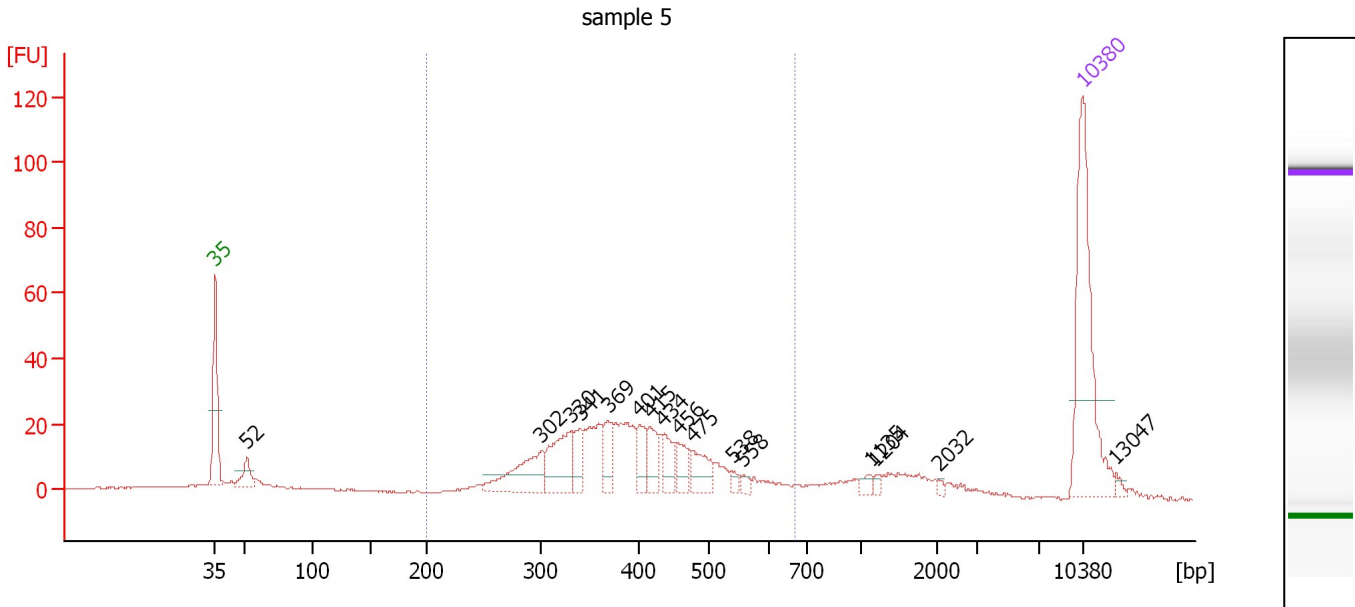
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/ μ l]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
220	767	439	899.1	1,184.76	4,393.0	79	22.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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 Modified: 12/12/2017 4:38:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 16 Corr. Area 1: 449.2
 Noise: 0.2

Peak table for sample 5 : sample 5

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	52	15.27	441.7		45.58
3	302	41.10	206.5		69.35
4	330	39.78	182.6		71.63
5	341	16.98	75.5		72.49
6	369	15.92	65.4		74.73
7	401	15.70	59.3		77.27
8	415	17.14	62.5		78.09
9	434	16.62	58.1		79.12
10	456	13.79	45.8		80.41
11	475	19.00	60.6		81.49
12	538	2.99	8.4		84.72
13	558	3.21	8.7		85.66
14	1,135	3.80	5.1		95.91
15	1,204	2.09	2.6		96.34
16	2,032	1.35	1.0		101.42
17	10,380	75.00	10.9	Upper Marker	113.00
18	13,047	0.00	0.0		115.71

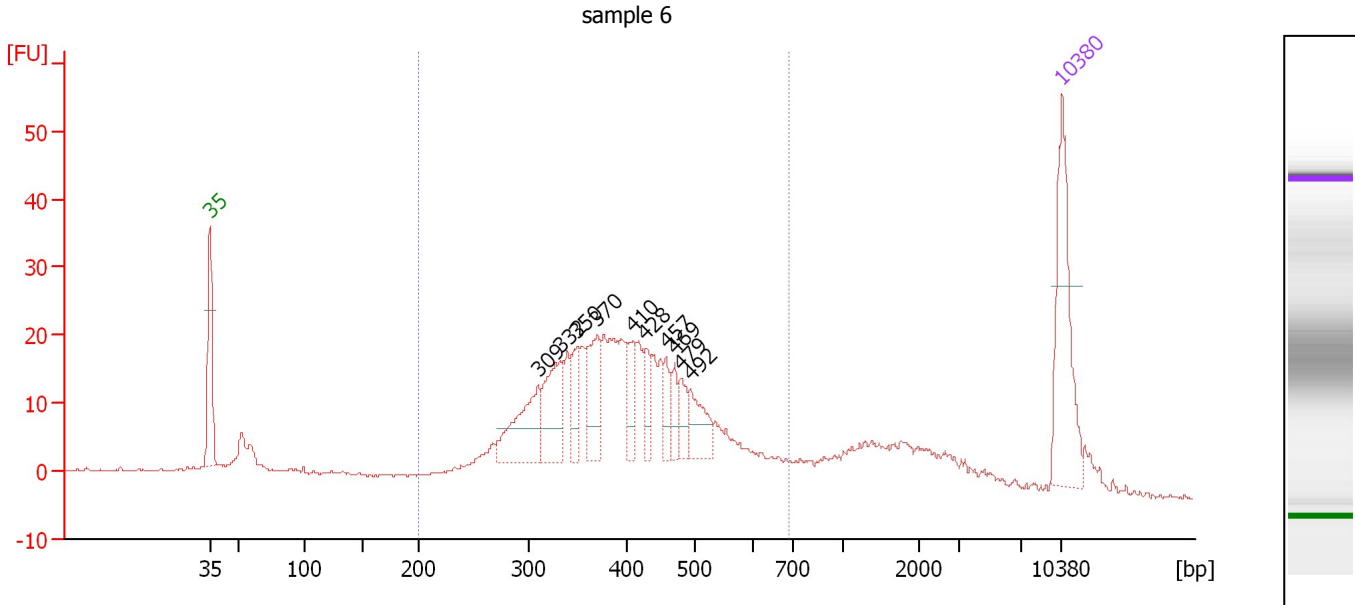
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	668	397	449.2	329.86	1,344.3	72	21.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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 Modified: 12/12/2017 4:38:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 10 Corr. Area 1: 466.8
 Noise: 0.1

Peak table for sample 6 : sample 6

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	309	71.40	350.1		69.94
3	332	63.34	289.0		71.78
4	350	26.60	115.3		73.18
5	370	49.21	201.6		74.80
6	410	24.98	92.3		77.78
7	428	19.64	69.6		78.79
8	457	17.92	59.4		80.45
9	469	15.18	49.0		81.15
10	479	18.08	57.2		81.68
11	492	31.70	97.6		82.42
12	10,380	75.00	10.9	Upper Marker	113.00

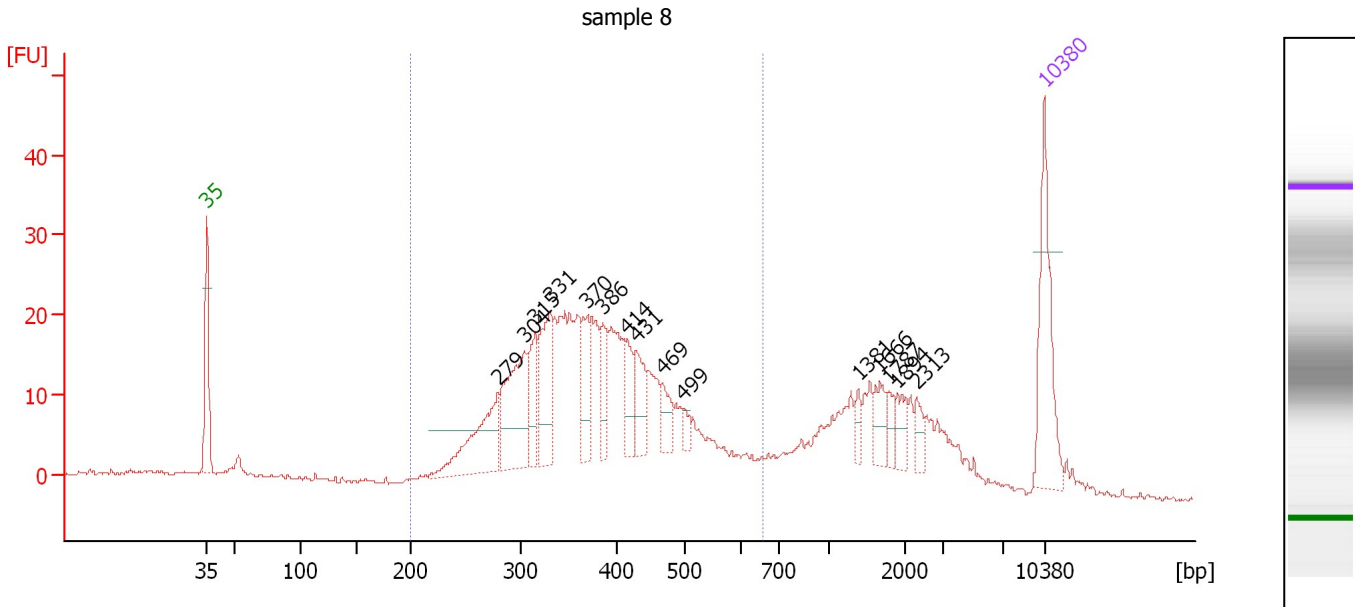
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	689	405	466.8	791.92	3,188.4	74	23.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 8

Number of peaks found: 15 Corr. Area 1: 463.8
 Noise: 0.2

Peak table for sample 7 : sample 8

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	279	98.38	533.8		67.33
3	304	113.82	566.9		69.56
4	315	47.63	228.8		70.45
5	331	81.97	375.2		71.70
6	370	48.67	199.3		74.81
7	386	33.79	132.6		76.11
8	414	31.01	113.4		78.02
9	431	40.09	141.0		78.96
10	469	22.93	74.1		81.14
11	499	8.77	26.6		82.83
12	1,381	9.50	10.4		97.45
13	1,666	19.62	17.8		99.23
14	1,787	11.38	9.6		99.99
15	1,894	17.19	13.8		100.66
16	2,313	12.15	8.0		102.31
17	10,380	75.00	10.9	Upper Marker	113.00

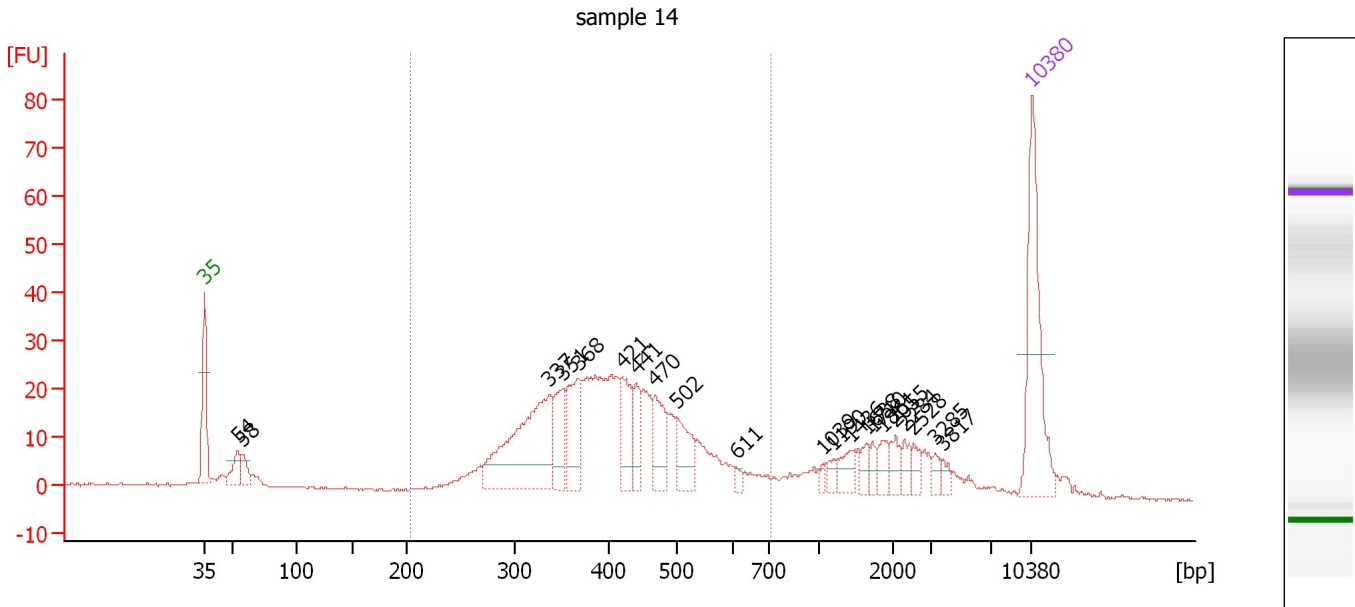
Region table for sample 7 : sample 8

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	659	384	463.8	1,156.64	4,898.6	70	23.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 14

Number of peaks found: 21 Corr. Area 1: 498.6
 Noise: 0.2

Peak table for sample 8 : sample 14


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	54	22.55	628.6		45.80
3	58	14.76	385.3		46.20
4	337	141.57	635.9		72.20
5	351	38.85	167.5		73.33
6	368	51.22	210.7		74.68
7	421	39.63	142.7		78.38
8	441	24.80	85.3		79.51
9	470	34.54	111.4		81.18
10	502	31.15	94.0		82.99
11	611	4.11	10.2		88.00
12	1,039	3.60	5.2		95.31
13	1,190	6.50	8.3		96.26
14	1,436	12.41	13.1		97.79
15	1,638	7.87	7.3		99.05
16	1,710	5.78	5.1		99.51
17	1,861	10.00	8.1		100.45
18	2,055	9.43	7.0		101.49
19	2,284	7.61	5.1		102.21
20	2,528	7.10	4.3		102.98
21	3,285	5.44	2.5		104.83
22	3,817	4.82	1.9		105.51
23	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

Created: 12/12/2017 3:55:27 PM
Modified: 12/12/2017 4:38:12 PM

Electropherogram Summary Continued ...

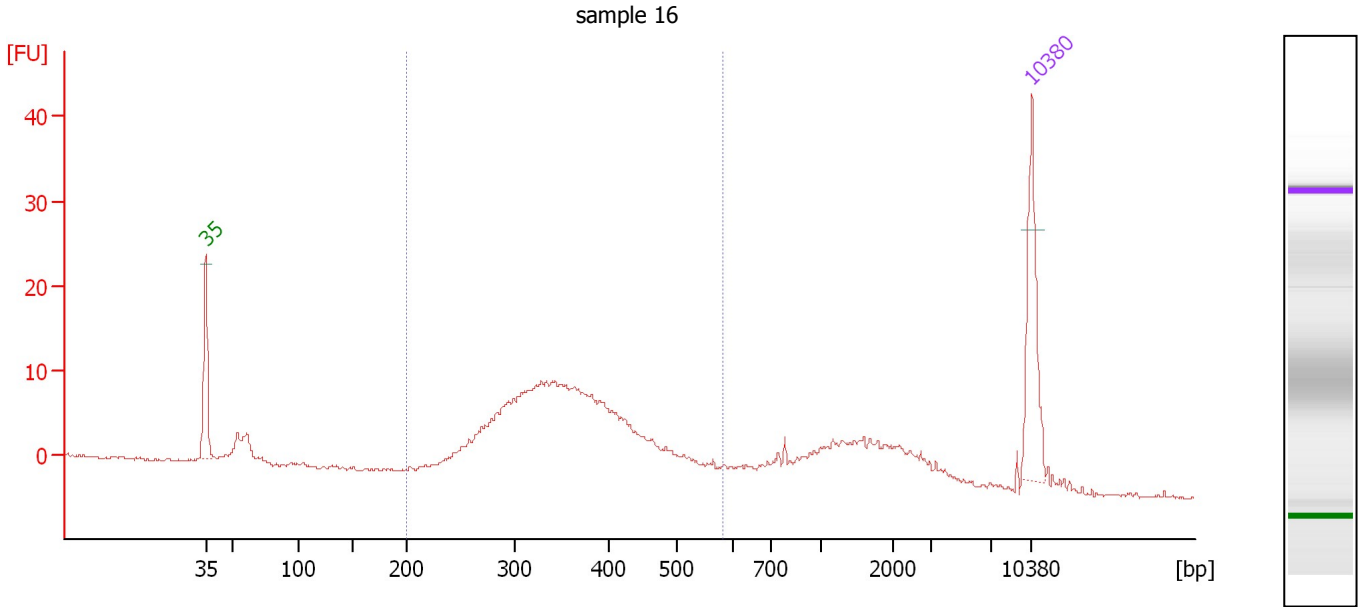
... Region table for sample 8 : sample 14

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/ μ l]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
203	705	411	498.6	636.59	2,508.0	 73	22.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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 Modified: 12/12/2017 4:38:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 16

Number of peaks found: 0 Corr. Area 1: 203.7
 Noise: 0.2

Peak table for sample 9 : sample 16

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	10,380	75.00	10.9	Upper Marker	113.00

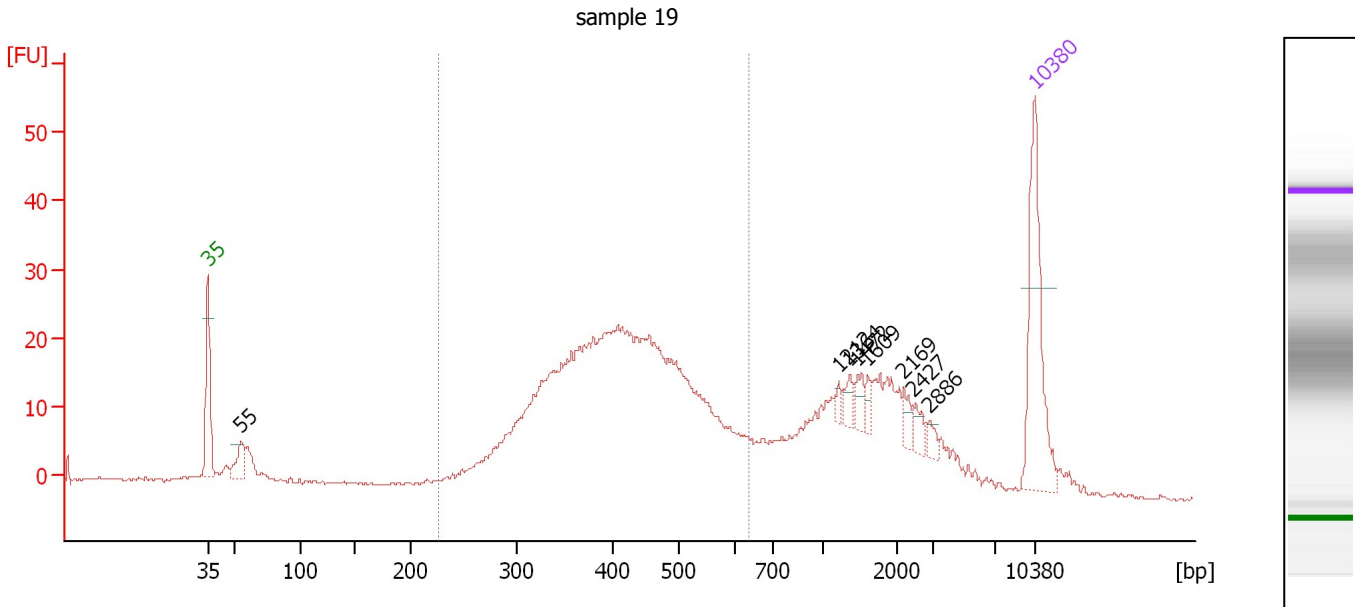
Region table for sample 9 : sample 16

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	582	363	203.7	653.03	2,880.3	68	20.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

Created: 12/12/2017 3:55:27 PM
 Modified: 12/12/2017 4:38:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 19

Number of peaks found: 8 Corr. Area 1: 471.7
 Noise: 0.1

Peak table for sample 10 : sample 19

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	55	23.27	643.9		45.84
3	1,212	4.14	5.2		96.39
4	1,364	8.62	9.6		97.34
5	1,472	8.77	9.0		98.02
6	1,609	6.42	6.0		98.87
7	2,169	8.33	5.8		101.85
8	2,427	8.57	5.4		102.66
9	2,886	6.00	3.1		104.11
10	10,380	75.00	10.9	Upper Marker	113.00

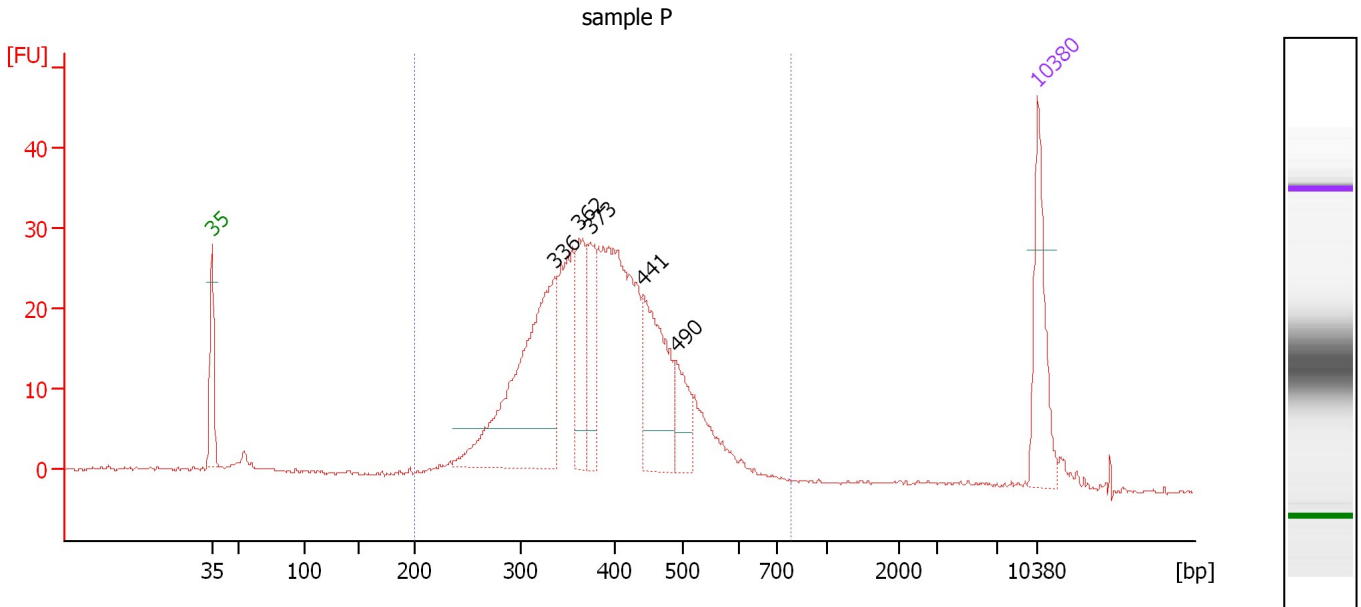
Region table for sample 10 : sample 19

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
227	634	419	471.7	850.11	3,277.0	64	20.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

Created: 12/12/2017 3:55:27 PM
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Electropherogram Summary Continued ...



Overall Results for sample 11 : sample P

Number of peaks found: 5 Corr. Area 1: 547.8
 Noise: 0.2

Peak table for sample 11 : sample P

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	336	327.39	1,477.4		72.08
3	362	85.83	359.5		74.16
4	373	70.55	286.5		75.06
5	441	143.71	493.8		79.54
6	490	53.40	165.0		82.34
7	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : sample P

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	791	391	547.8	1,336.65	5,475.4	94	20.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_002.xad

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Gel Image

