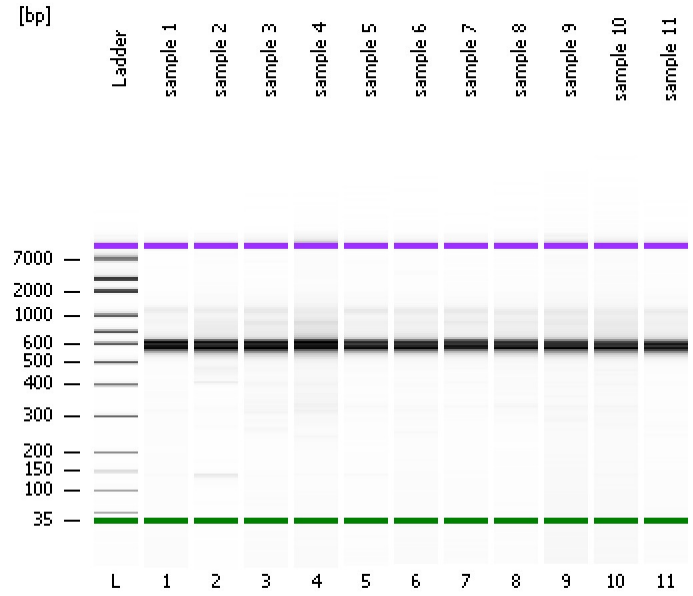
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

Assay Information:

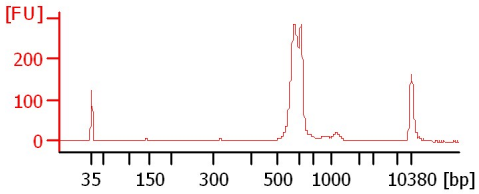
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

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

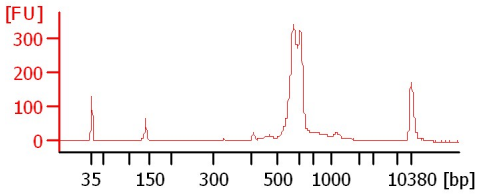
Chip Information:

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

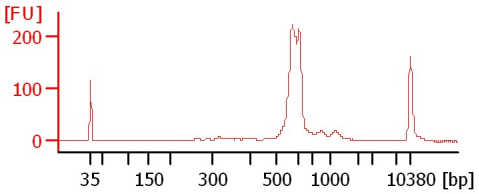
sample 1



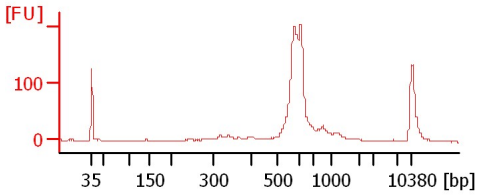
sample 2



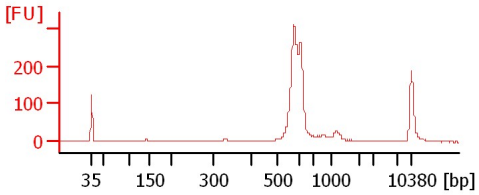
sample 3



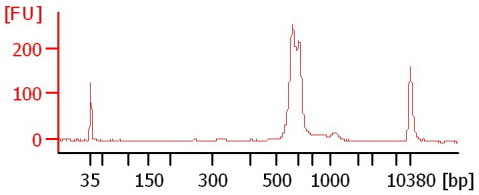
sample 4



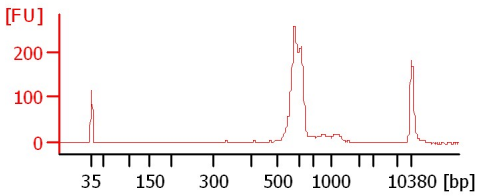
sample 5



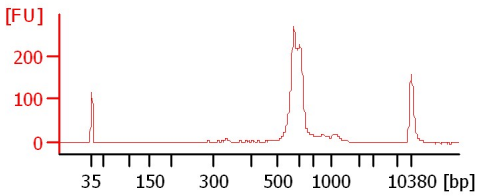
sample 6



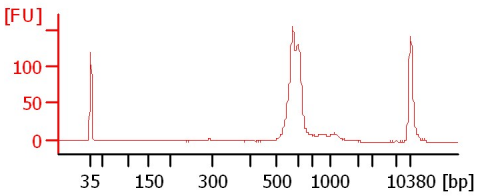
sample 7



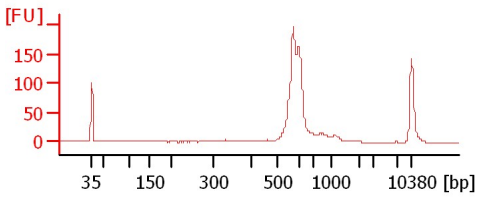
sample 8



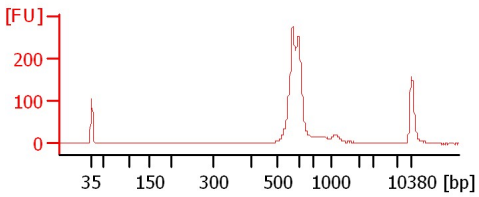
sample 9



sample 10



sample 11



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		☐	✔			
sample 2		☐	✔			
sample 3		☐	✔			
sample 4		☐	✔			
sample 5		☐	✔			
sample 6		☐	✔			
sample 7		☐	✔			
sample 8		☐	✔			
sample 9		☐	✔			
sample 10		☐	✔			
sample 11		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 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\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
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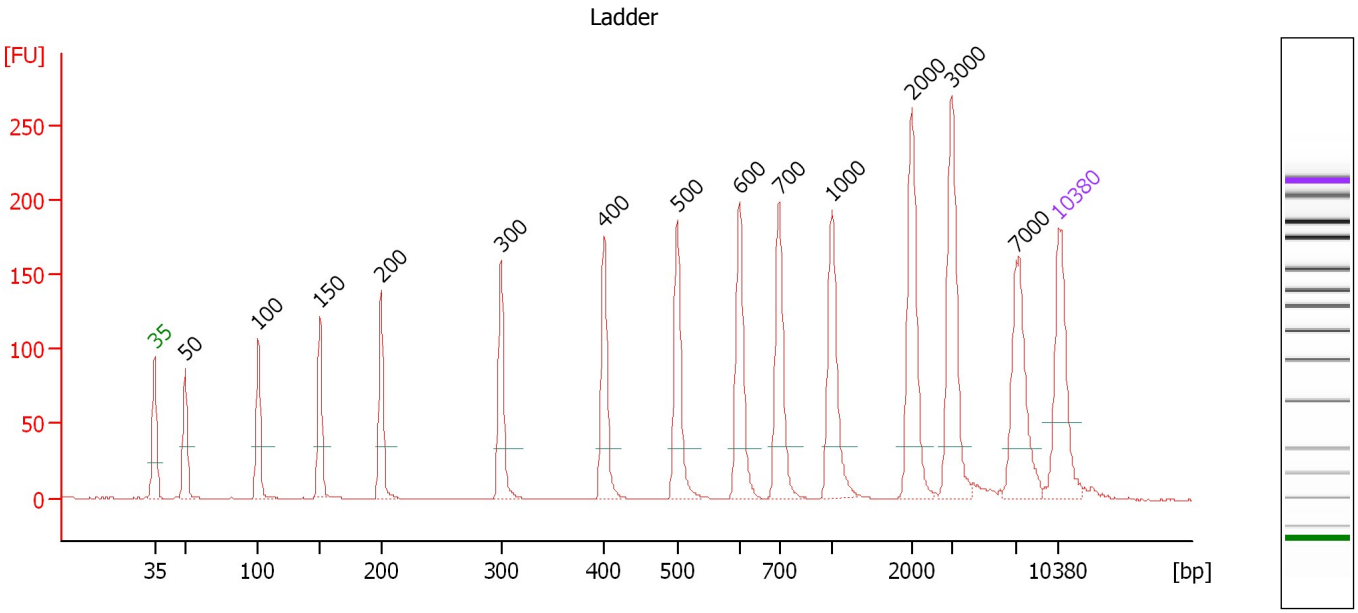
Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

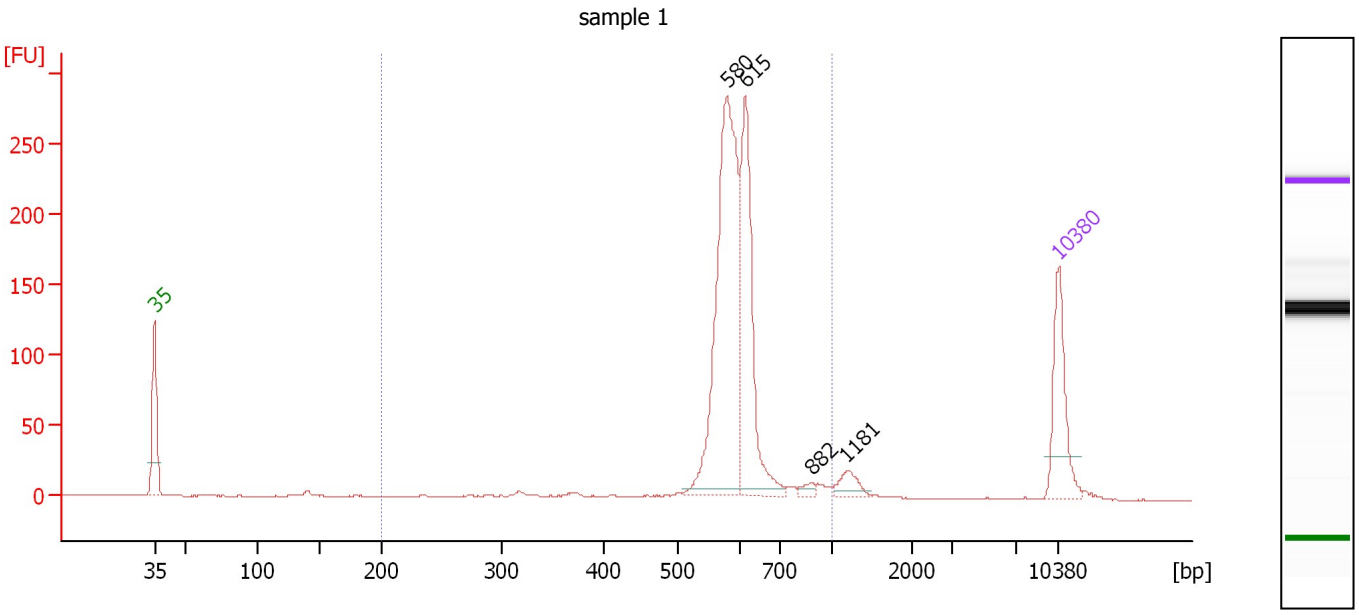
Peak table for Ladder

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	45.37
3		100	150.00	2,272.7	Ladder Peak	51.04
4		150	150.00	1,515.2	Ladder Peak	55.82
5		200	150.00	1,136.4	Ladder Peak	60.52
6		300	150.00	757.6	Ladder Peak	69.83
7		400	150.00	568.2	Ladder Peak	77.82
8		500	150.00	454.5	Ladder Peak	83.49
9		600	150.00	378.8	Ladder Peak	88.28
10		700	150.00	324.7	Ladder Peak	91.35
11		1,000	150.00	227.3	Ladder Peak	95.48
12		2,000	150.00	113.6	Ladder Peak	101.63
13		3,000	150.00	75.8	Ladder Peak	104.70
14		7,000	150.00	32.5	Ladder Peak	109.71
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found:	4	Corr. Area 1:	1,068.2
Noise:	0.3		

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	580	387.78	1,012.6		87.33
3	615	216.13	532.4		88.74
4	882	7.82	13.4		93.86
5	1,181	19.17	24.6		96.59
6	10,380	75.00	10.9	Upper Marker	113.00

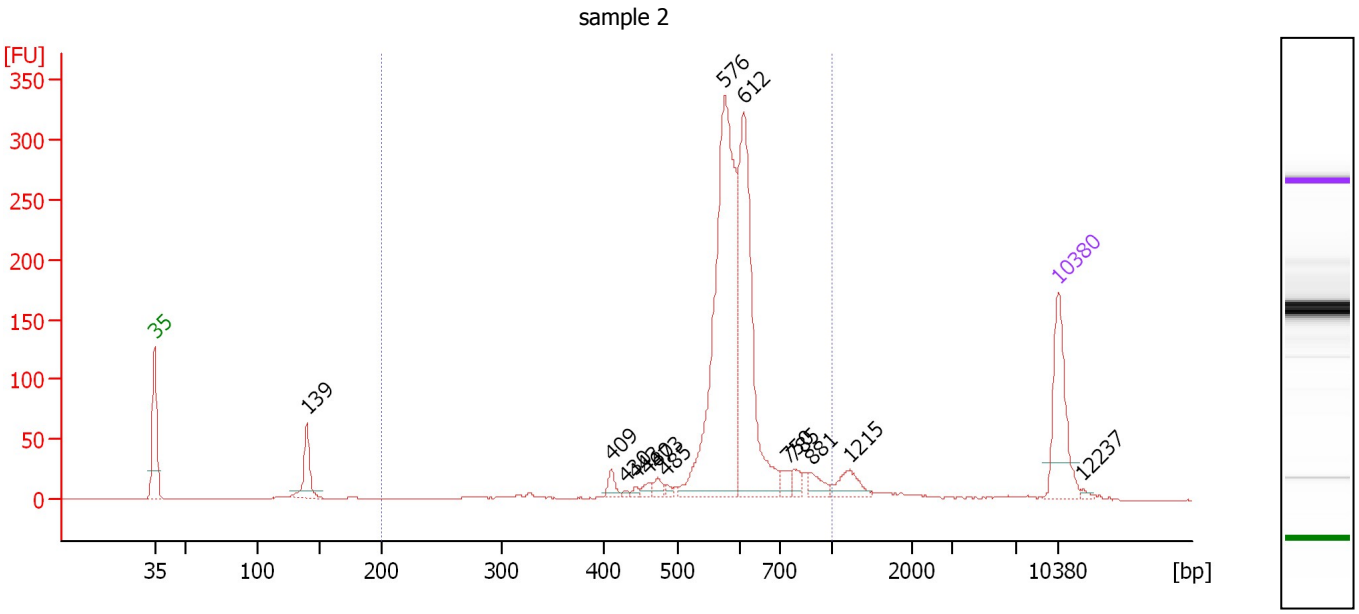
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	600	653.85	1,068.2	1,681.8	95	11.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found:	14	Corr. Area 1:	1,473.8
Noise:	0.3		

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	139	55.23	601.4		54.78
3	409	12.64	46.8		78.35
4	430	2.92	10.3		79.50
5	443	4.34	14.8		80.25
6	460	7.43	24.5		81.22
7	473	10.26	32.9		81.97
8	485	4.64	14.5		82.63
9	576	426.22	1,120.8		87.14
10	612	273.85	678.3		88.64
11	750	12.20	24.6		92.04
12	785	11.28	21.8		92.52
13	881	15.49	26.6		93.84
14	1,215	24.48	30.5		96.80
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,237	0.00	0.0		114.81

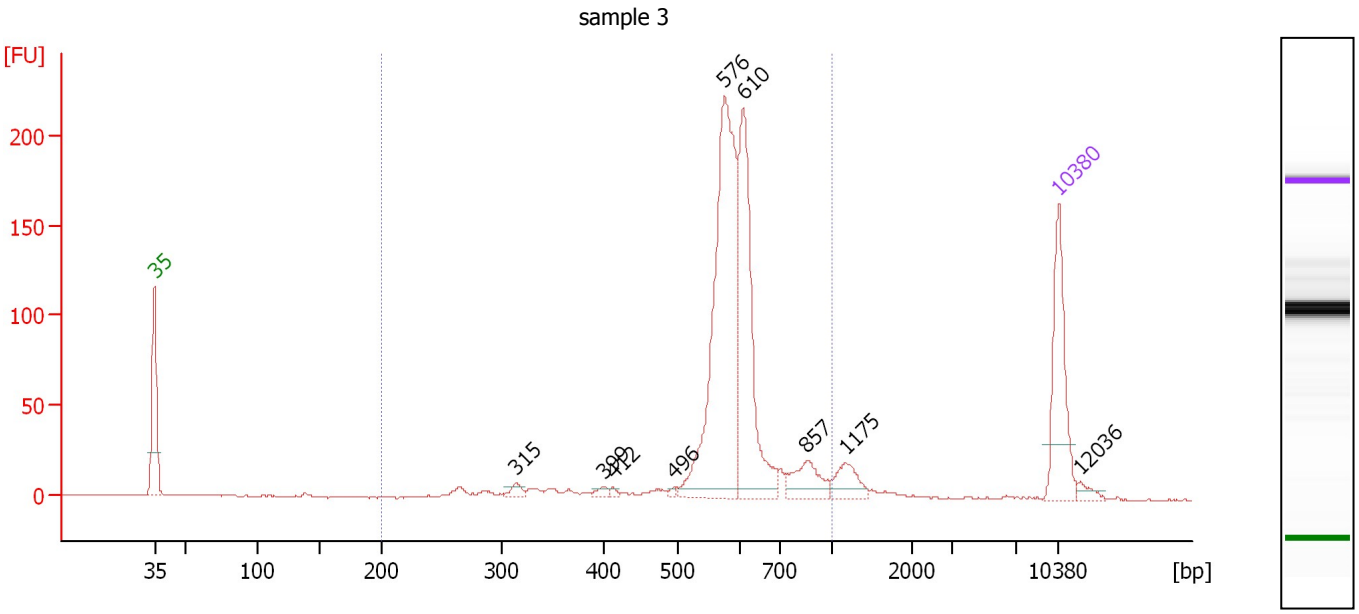
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	594	849.08	1,473.8	2,252.7	88	15.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found:	9	Corr. Area 1:	993.4
Noise:	0.3		

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	315	8.29	39.9		71.01
3	399	5.85	22.2		77.78
4	412	3.31	12.2		78.49
5	496	3.00	9.2		83.24
6	576	334.84	880.3		87.14
7	610	197.63	491.1		88.58
8	857	35.23	62.3		93.51
9	1,175	24.09	31.1		96.55
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,036	0.00	0.0		114.61

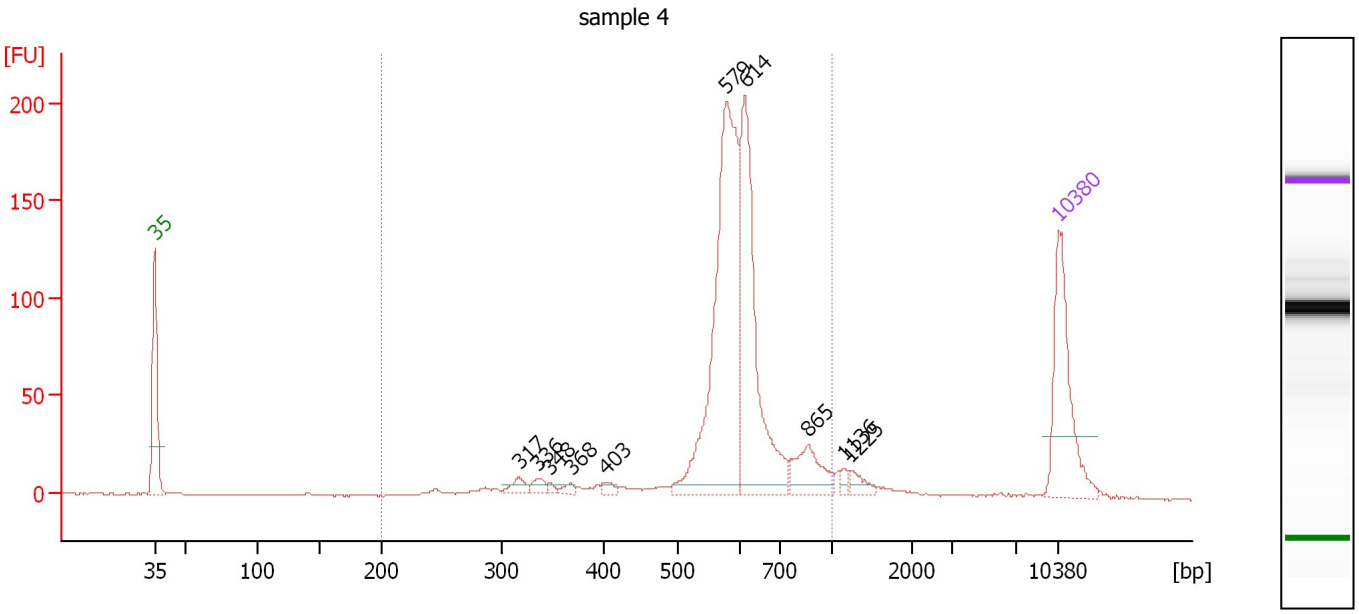
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	592	644.75	993.4	1,740.3	92	17.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found:	10	Corr. Area 1:	1,033.7
Noise:	0.4		

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	317	10.37	49.5		71.21
3	336	8.46	38.2		72.72
4	348	3.36	14.6		73.63
5	368	4.85	20.0		75.28
6	403	5.16	19.4		77.98
7	579	278.04	727.9		87.26
8	614	189.44	467.1		88.72
9	865	36.61	64.2		93.61
10	1,136	4.11	5.5		96.31
11	1,225	8.73	10.8		96.86
12	10,380	75.00	10.9	Upper Marker	113.00

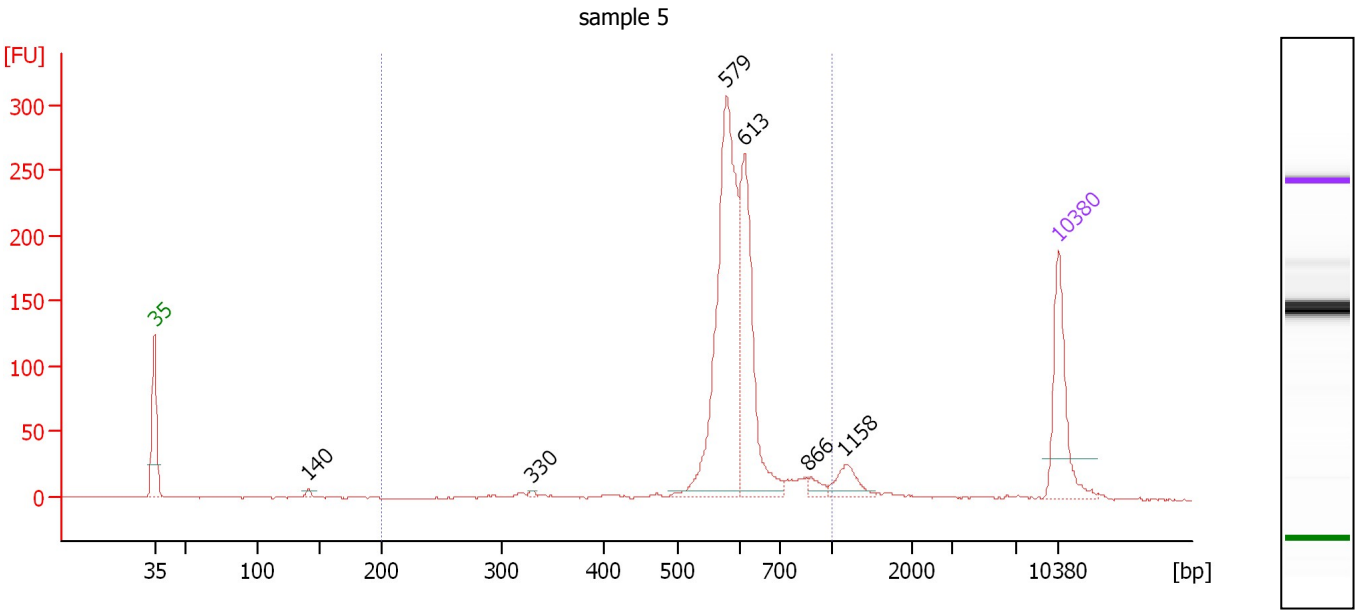
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	596	590.86	1,033.7	1,603.9	93	18.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found:	6	Corr. Area 1:	1,103.6
Noise:	0.5		

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	140	4.72	50.9		54.91
3	330	3.11	14.3		72.26
4	579	336.24	880.2		87.26
5	613	192.30	475.5		88.67
6	866	10.44	18.3		93.64
7	1,158	24.46	32.0		96.45
8	10,380	75.00	10.9	Upper Marker	113.00

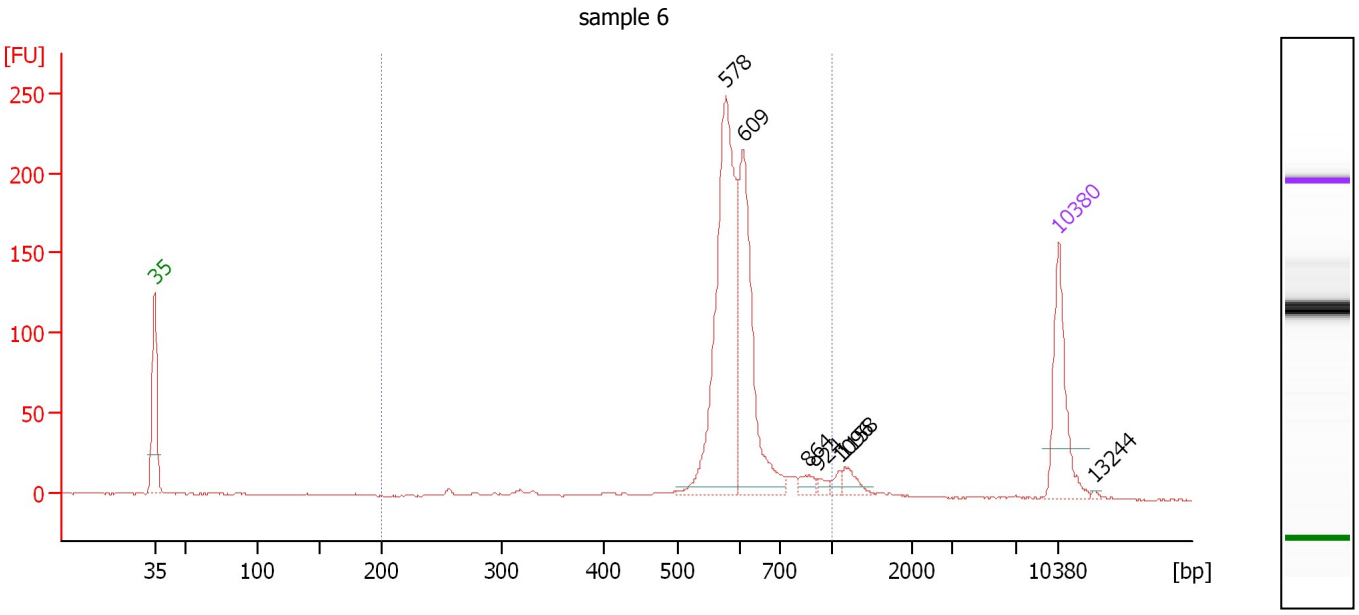
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Total	Size distribution in CV [%]
200	1,000	602	585.95	1,103.6	1,511.8	92	13.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found:	7	Corr. Area 1:	907.7
Noise:	0.3		

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	578	321.42	842.9		87.21
3	609	200.89	499.6		88.56
4	864	10.98	19.2		93.61
5	924	6.07	10.0		94.43
6	1,096	6.07	8.4		96.07
7	1,158	14.60	19.1		96.45
8	10,380	75.00	10.9	Upper Marker	113.00
9	13,244	0.00	0.0		115.79

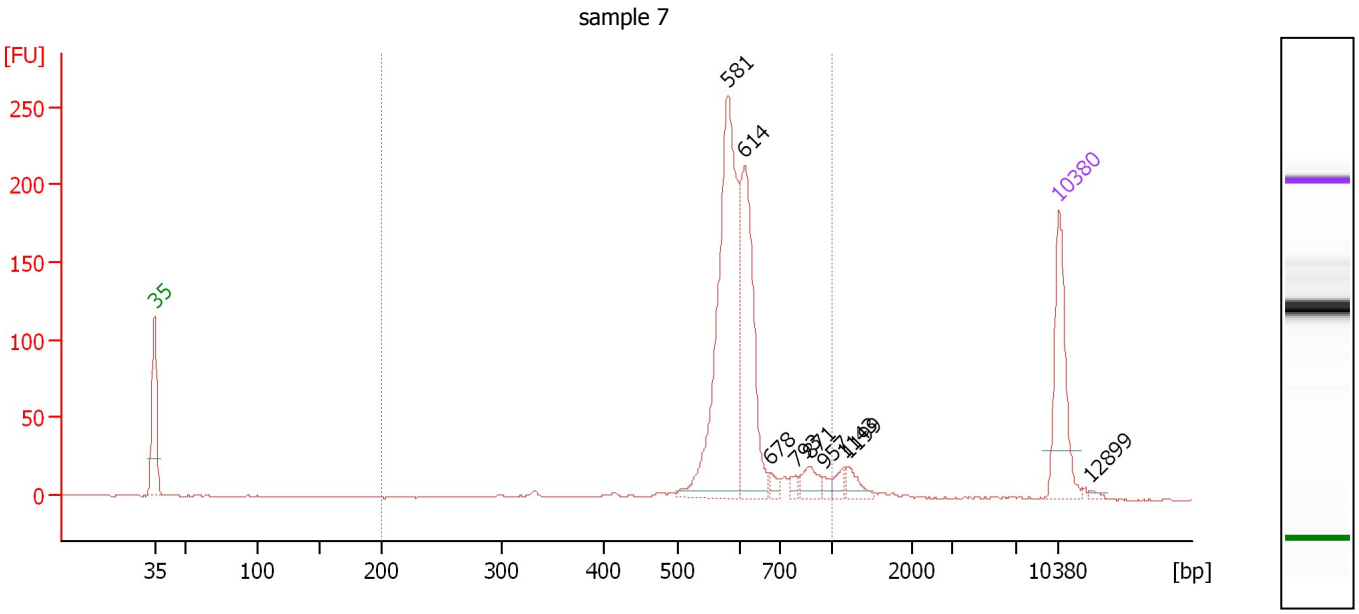
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	604	582.02	907.7	1,496.5	94	13.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found:	9	Corr. Area 1:	924.5
Noise:	0.3		

Peak table for sample 7 : sample 7

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	581	308.81	805.1		87.38
3	614	177.98	439.3		88.70
4	678	7.42	16.6		90.66
5	793	6.07	11.6		92.63
6	871	18.32	31.8		93.71
7	957	5.29	8.4		94.89
8	1,143	8.88	11.8		96.36
9	1,199	13.75	17.4		96.70
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,899	0.00	0.0		115.45

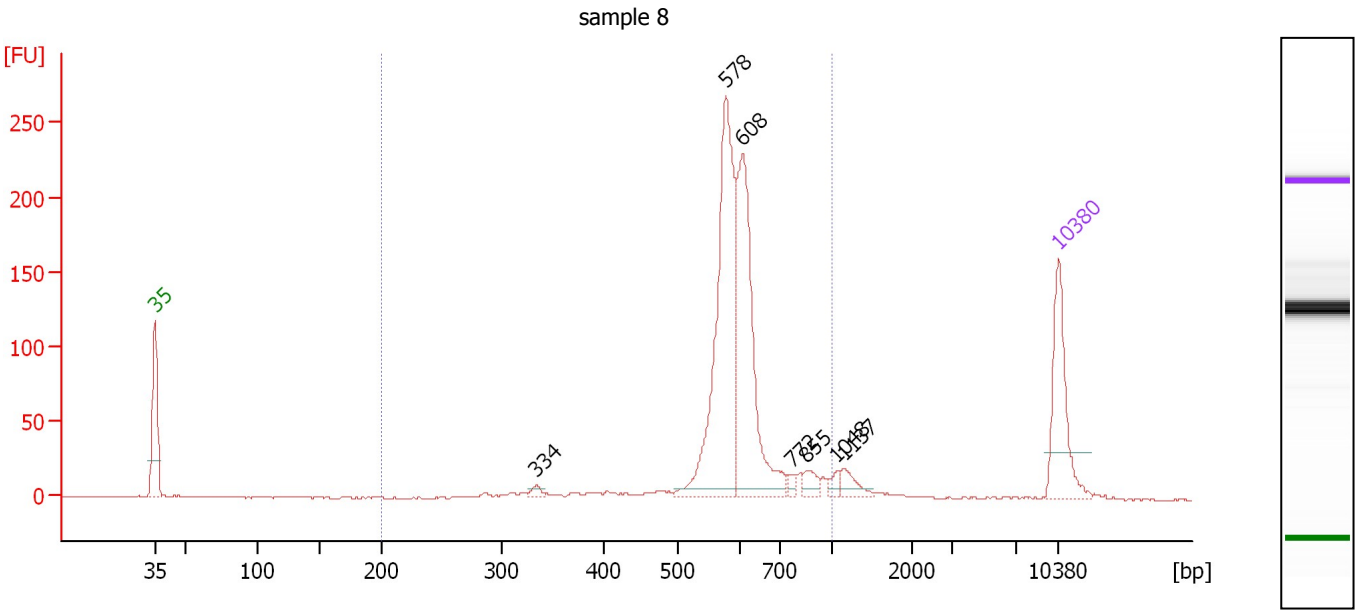
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	611	547.39	924.5	1,385.3	93	13.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found:	7	Corr. Area 1:	1,013.0
Noise:	0.4		

Peak table for sample 8 : 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	334	7.06	32.0		72.59
3	578	300.80	788.2		87.23
4	608	230.23	573.6		88.52
5	772	6.36	12.5		92.35
6	855	12.92	22.9		93.49
7	1,048	7.42	10.7		95.77
8	1,137	16.12	21.5		96.32
9	10,380	75.00	10.9	Upper Marker	113.00

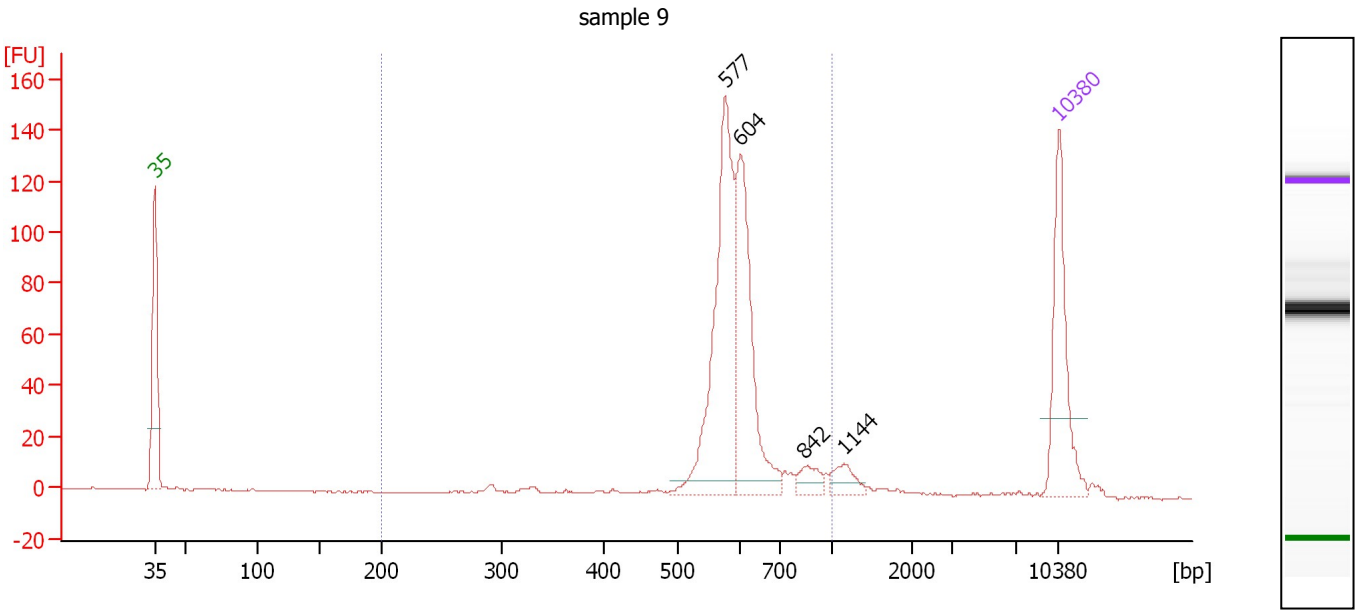
Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	601	615.78	1,013.0	1,609.3	94	15.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found:	4	Corr. Area 1:	566.9
Noise:	0.3		

Peak table for sample 9 : sample 9

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	577	204.53	536.7		87.19
3	604	144.88	363.5		88.40
4	842	15.10	27.2		93.31
5	1,144	15.59	20.6		96.36
6	10,380	75.00	10.9	Upper Marker	113.00

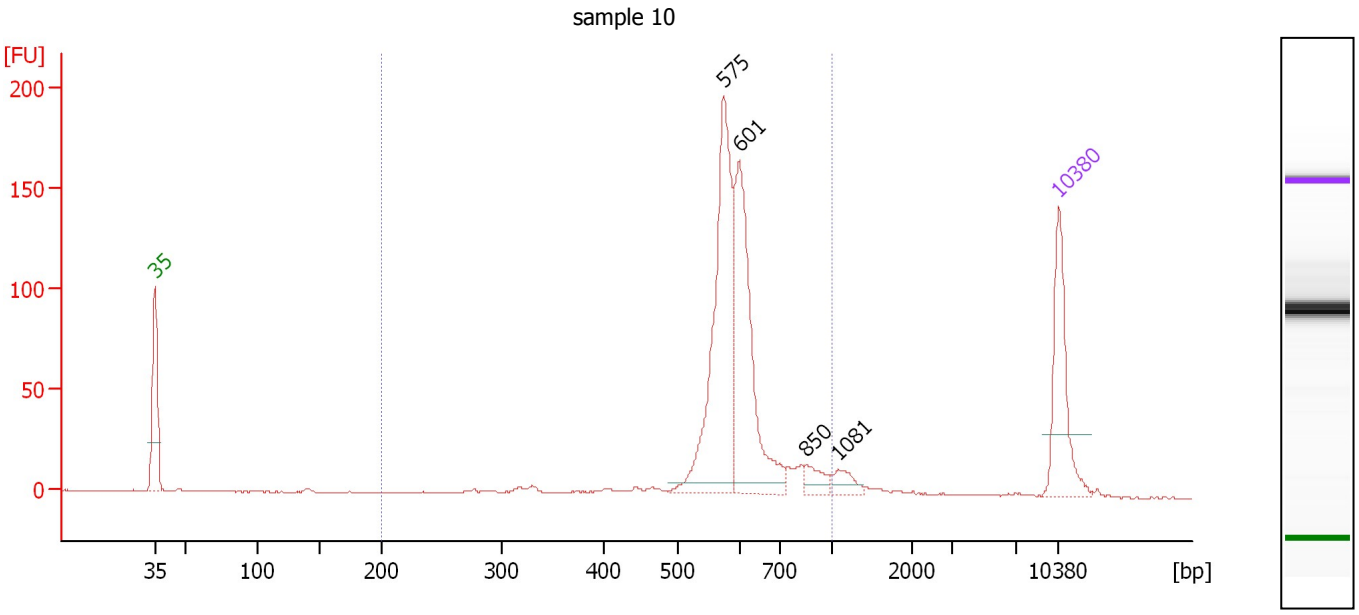
Region table for sample 9 : sample 9

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	607	389.42	566.9	994.2	92	13.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found:	4	Corr. Area 1:	745.5
Noise:	0.3		

Peak table for sample 10 : sample 10

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	575	251.67	662.9		87.09
3	601	197.70	498.7		88.29
4	850	18.27	32.6		93.42
5	1,081	14.98	21.0		95.98
6	10,380	75.00	10.9	Upper Marker	113.00

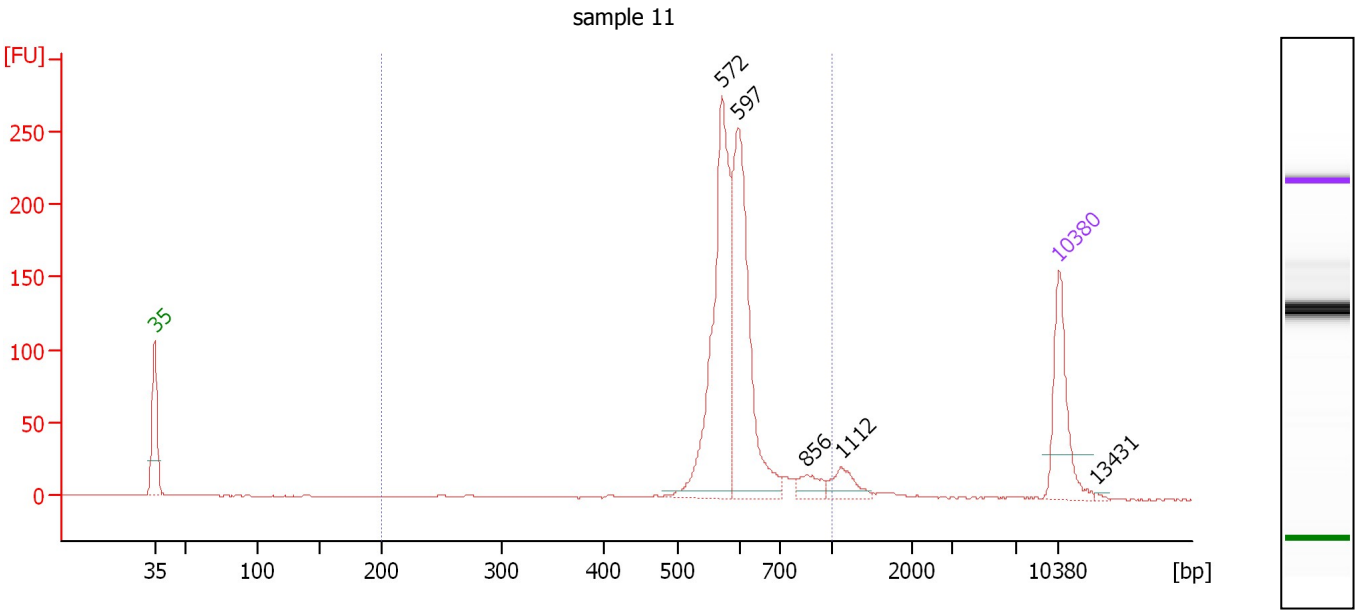
Region table for sample 10 : sample 10

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	603	518.18	745.5	1,344.7	93	15.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found:	5	Corr. Area 1:	983.5
Noise:	0.3		

Peak table for sample 11 : sample 11

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	572	292.50	774.5		86.95
3	597	254.20	644.6		88.15
4	856	19.63	34.8		93.50
5	1,112	24.49	33.4		96.17
6	10,380	75.00	10.9	Upper Marker	113.00
7	13,431	0.00	0.0		115.97

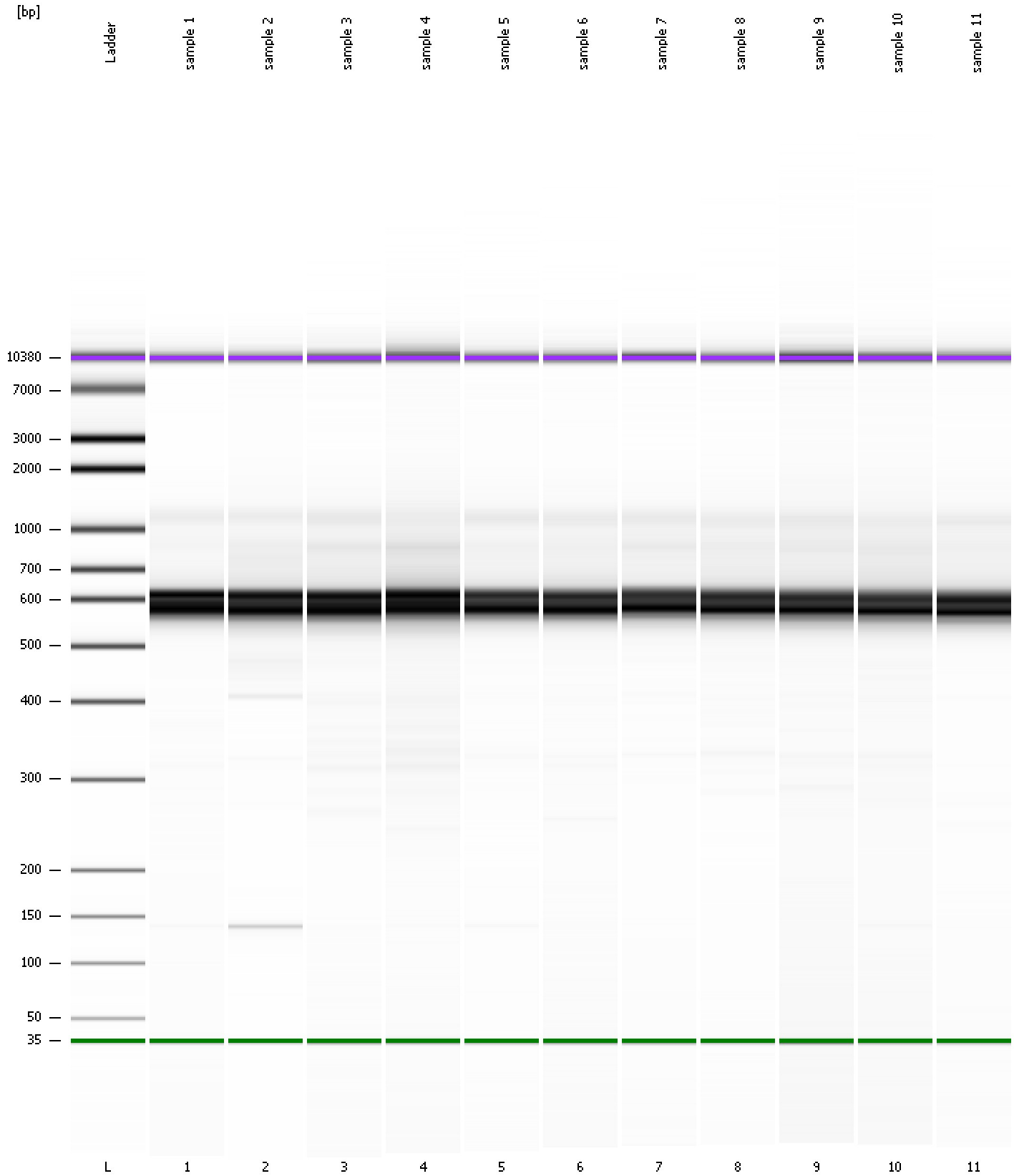
Region table for sample 11 : sample 11

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	604	583.68	983.5	1,486.8	94	12.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-11\2019-10-11_002.xad

Created: 10/11/2019 10:21:10 AM
Modified: 10/11/2019 11:02:22 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		10/11/2019 11:02:22 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\2019-10-11\2019-10-11_002.xad)		Instrument	Run		10/11/2019 10:21:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		10/11/2019 10:21:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/11/2019 10:21:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/11/2019 10:21:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		10/11/2019 10:21:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/11/2019 10:21:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/11/2019 10:21:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1