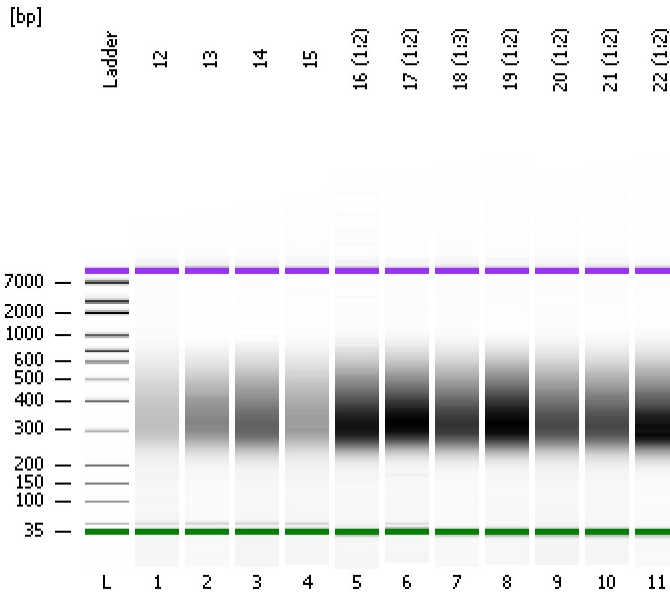


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
Modified: 1/18/2019 5:02:30 PM

Electrophoresis File Run Summary



Instrument Information:

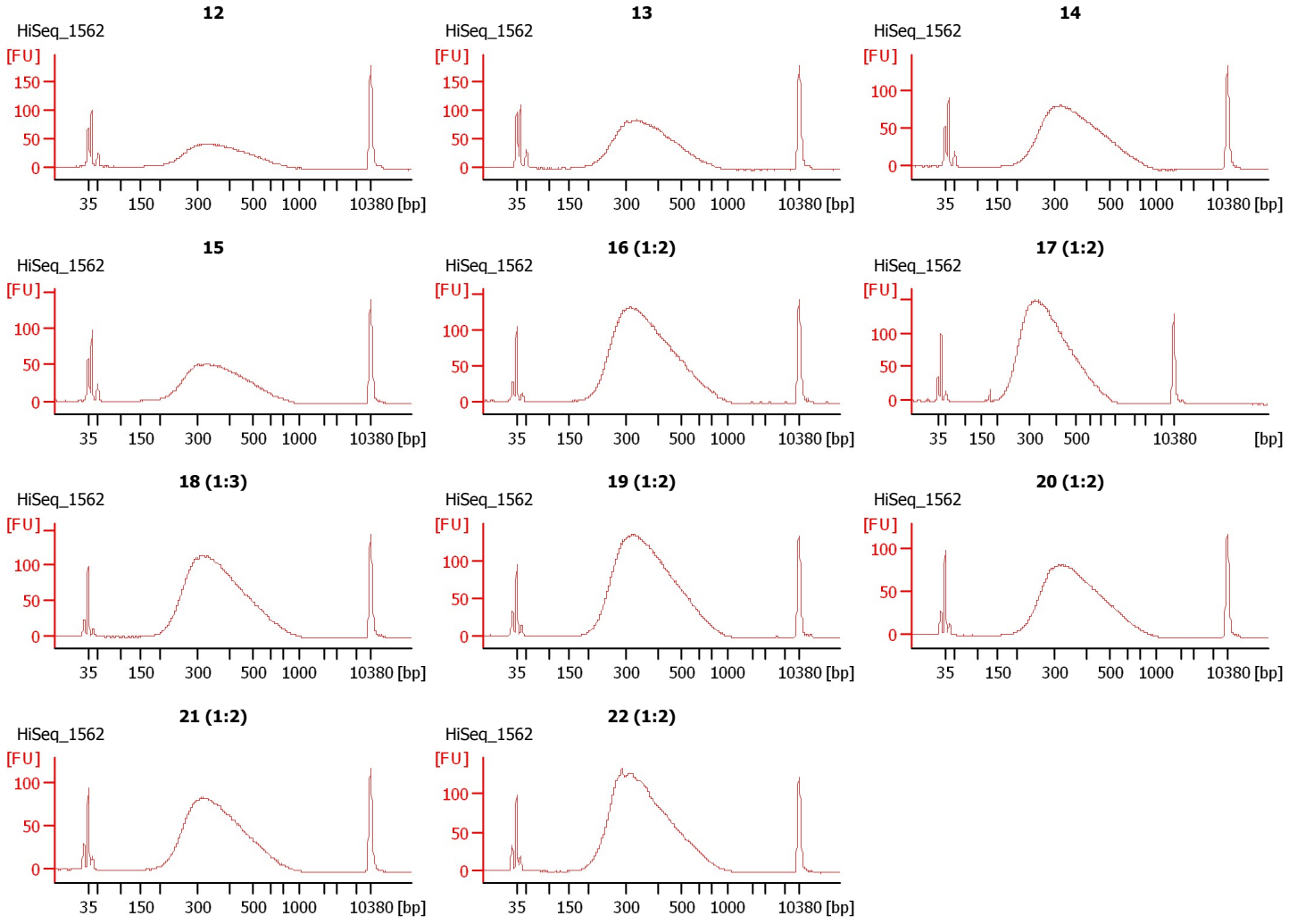
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
12	HiSeq_1562	<input type="checkbox"/>	✓			
13	HiSeq_1562	<input type="checkbox"/>	✓			
14	HiSeq_1562	<input type="checkbox"/>	✓			
15	HiSeq_1562	<input type="checkbox"/>	✓			
16 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
17 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
18 (1:3)	HiSeq_1562	<input type="checkbox"/>	✓			
19 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
20 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
21 (1:2)	HiSeq_1562	<input type="checkbox"/>	✓			
22 (1:2)	HiSeq_1562	<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\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
Modified: 1/18/2019 5:02:30 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/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

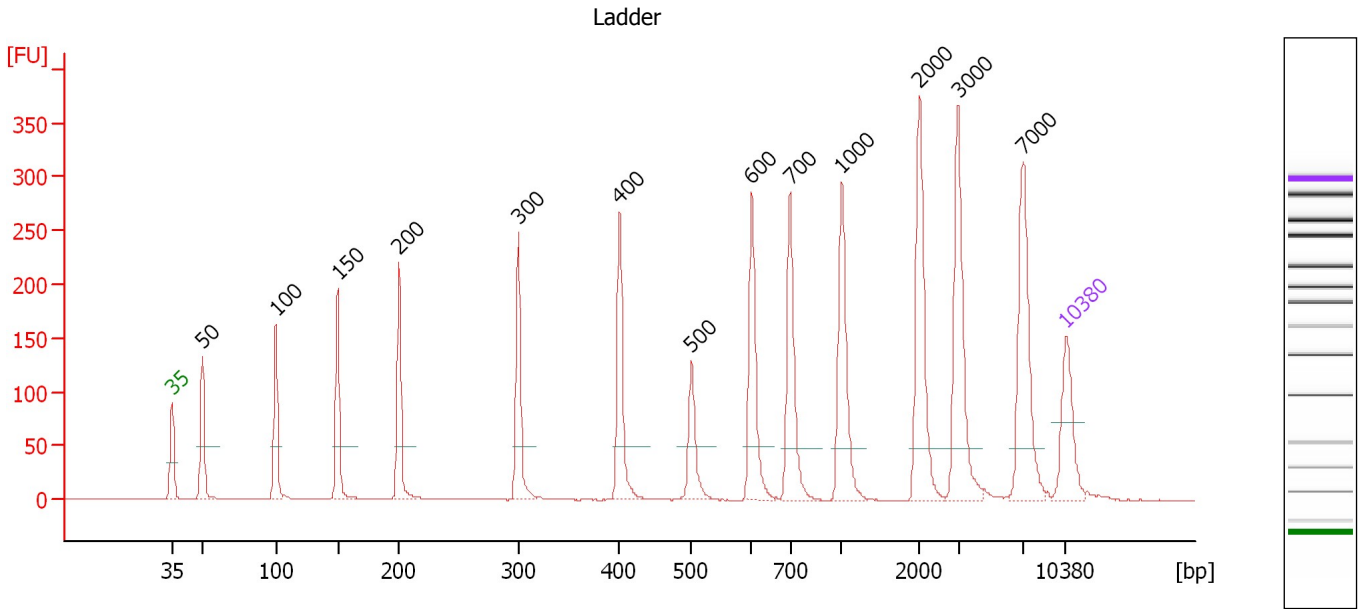
Ladder

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\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

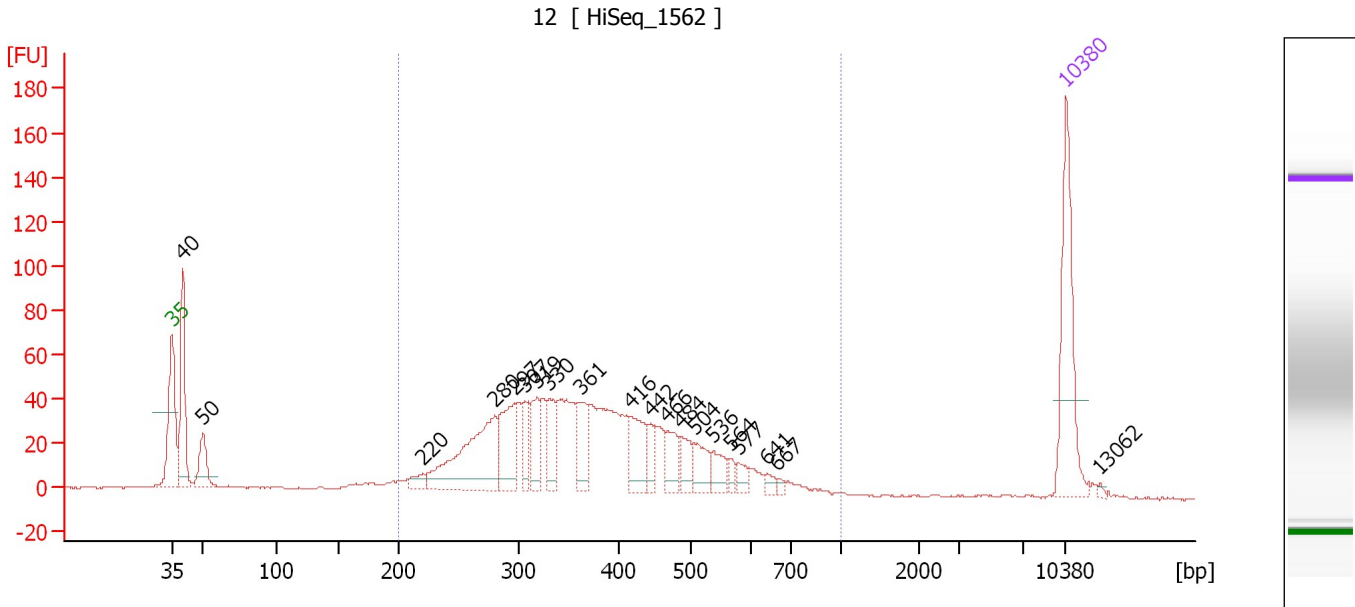
Peak table for Ladder

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	45.39
3	100	150.00	2,272.7	Ladder Peak	51.15
4	150	150.00	1,515.2	Ladder Peak	55.99
5	200	150.00	1,136.4	Ladder Peak	60.78
6	300	150.00	757.6	Ladder Peak	70.13
7	400	150.00	568.2	Ladder Peak	78.05
8	500	150.00	454.5	Ladder Peak	83.71
9	600	150.00	378.8	Ladder Peak	88.41
10	700	150.00	324.7	Ladder Peak	91.40
11	1,000	150.00	227.3	Ladder Peak	95.45
12	2,000	150.00	113.6	Ladder Peak	101.53
13	3,000	150.00	75.8	Ladder Peak	104.57
14	7,000	150.00	32.5	Ladder Peak	109.64
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 12

Number of peaks found: 20 Corr. Area 1: 1,114.8
 Noise: 0.4

Peak table for sample 1 : 12

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	40	106.56	4,017.7		43.83
3	50	39.57	1,190.1		45.44
4	220	11.66	80.2		62.68
5	280	128.11	692.2		68.30
6	297	62.15	317.4		69.81
7	307	26.93	133.1		70.64
8	319	39.18	186.3		71.61
9	330	32.17	147.5		72.53
10	361	34.45	144.6		74.96
11	416	40.06	145.8		78.97
12	442	15.97	54.7		80.44
13	466	23.39	76.1		81.77
14	484	19.69	61.6		82.83
15	504	22.93	69.0		83.89
16	536	18.29	51.7		85.40
17	564	6.80	18.3		86.74
18	577	9.70	25.5		87.34
19	641	5.79	13.7		89.64
20	667	3.24	7.4		90.42
21	10,380	75.00	10.9	Upper Marker	113.00
22	13,062	0.00	0.0		115.67

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...

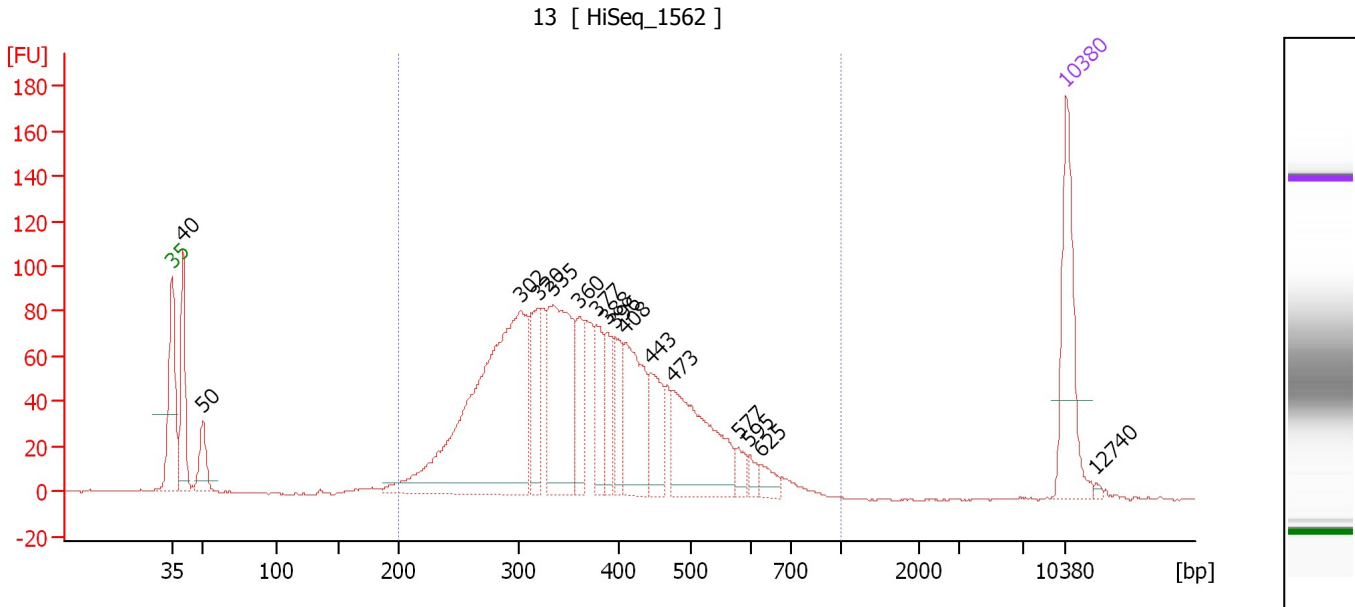
... Region table for sample 1 : 12

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ μ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	387	789.84	1,114.8	3,440.3	 84	29.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 13

Number of peaks found: 16 Corr. Area 1: 2,037.0
 Noise: 0.4

Peak table for sample 2 : 13

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	40	104.53	3,912.7		43.87
3	50	43.00	1,293.1		45.44
4	302	417.87	2,095.8		70.29
5	320	70.86	335.4		71.72
6	335	179.91	814.6		72.87
7	360	48.91	205.7		74.89
8	377	41.49	166.7		76.23
9	388	39.09	152.8		77.06
10	396	39.78	152.3		77.70
11	408	97.96	364.0		78.48
12	443	51.76	176.8		80.51
13	473	134.74	431.9		82.17
14	577	12.21	32.1		87.32
15	595	9.40	23.9		88.19
16	625	13.04	31.6		89.16
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,740	0.00	0.0		115.35

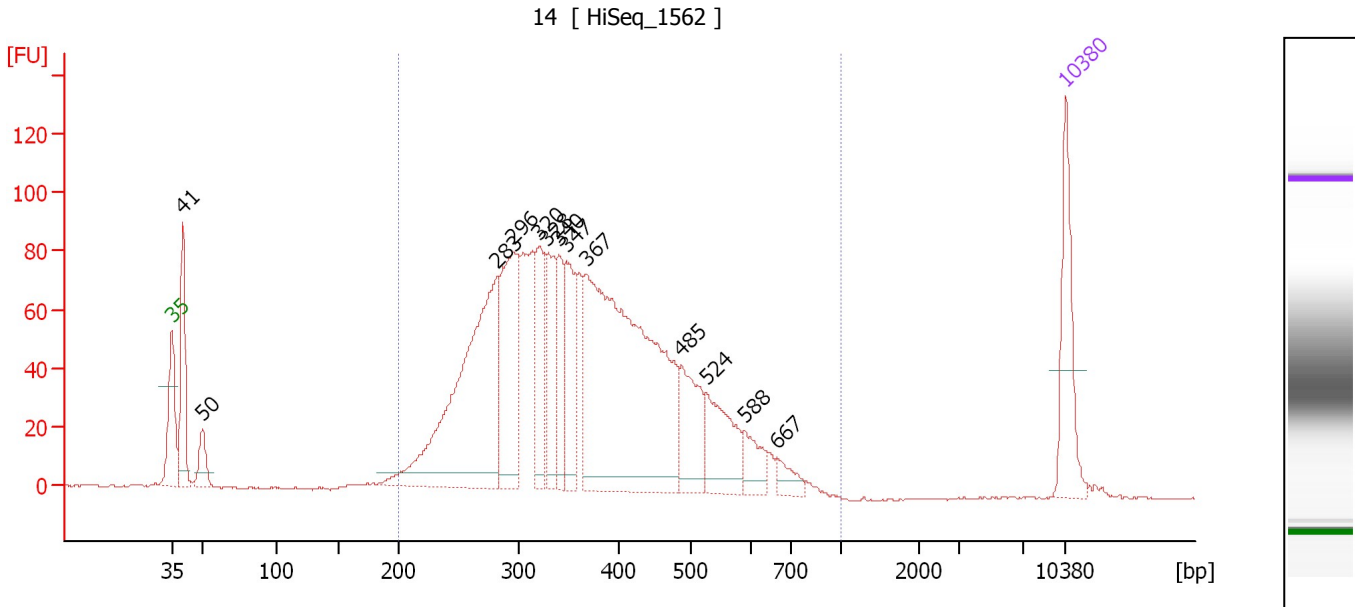
Region table for sample 2 : 13

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	377	1,323.11	2,037.0	5,817.8	91	26.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 14

Number of peaks found: 13 Corr. Area 1: 2,056.7
 Noise: 0.4

Peak table for sample 3 : 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	41	132.40	4,944.7		43.89
3	50	41.33	1,253.7		45.39
4	283	426.46	2,286.2		68.50
5	296	202.98	1,038.5		69.76
6	320	92.05	435.5		71.73
7	328	93.75	433.1		72.34
8	340	74.05	329.7		73.32
9	347	85.41	372.5		73.88
10	367	584.47	2,413.4		75.43
11	485	91.42	285.6		82.87
12	524	92.61	267.9		84.83
13	588	35.57	91.7		87.83
14	667	20.51	46.6		90.40
15	10,380	75.00	10.9	Upper Marker	113.00

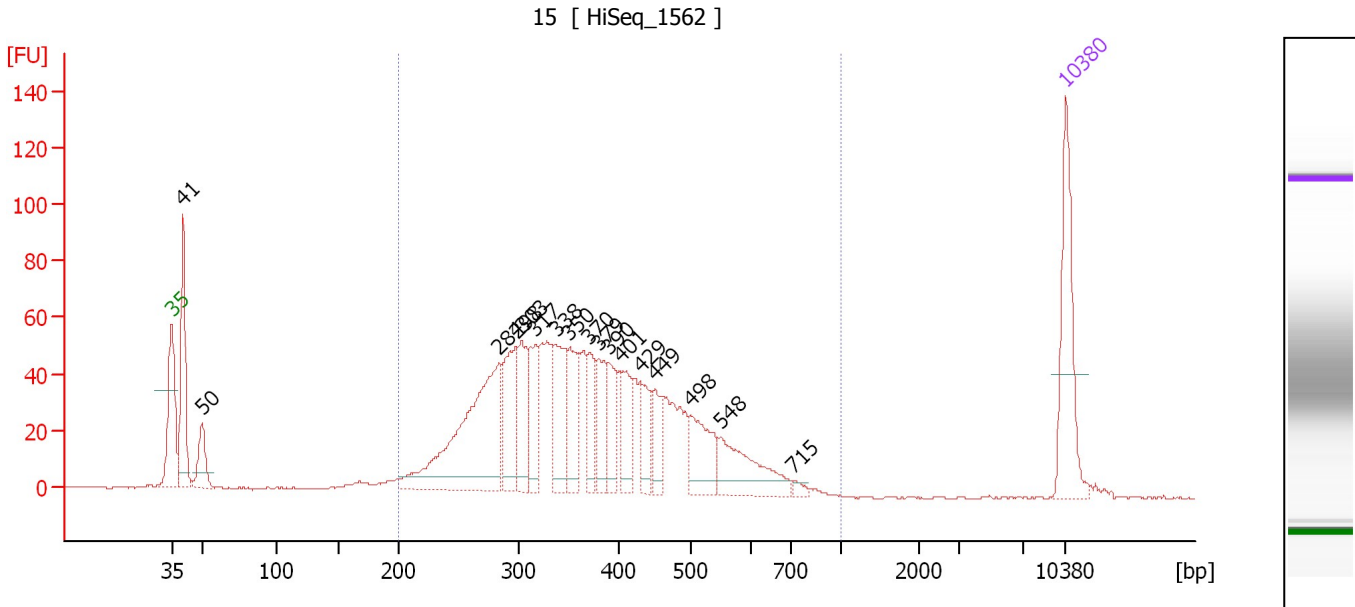
Region table for sample 3 : 14

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	375	2,037.51	2,056.7	9,065.6	93	27.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 15

Number of peaks found: 17 Corr. Area 1: 1,325.3
 Noise: 0.3

Peak table for sample 4 : 15

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	41	130.87	4,875.5		43.91
3	50	43.97	1,334.5		45.38
4	284	237.98	1,271.6		68.59
5	298	87.28	443.3		69.97
6	303	63.43	316.7		70.40
7	317	50.92	243.6		71.45
8	338	74.43	333.9		73.12
9	350	51.98	224.8		74.12
10	370	36.73	150.3		75.69
11	379	45.40	181.4		76.40
12	390	45.03	174.9		77.26
13	401	46.41	175.2		78.12
14	429	38.35	135.4		79.69
15	449	33.42	112.7		80.84
16	498	55.92	170.1		83.60
17	548	69.86	193.0		85.98
18	715	5.33	11.3		91.60
19	10,380	75.00	10.9	Upper Marker	113.00

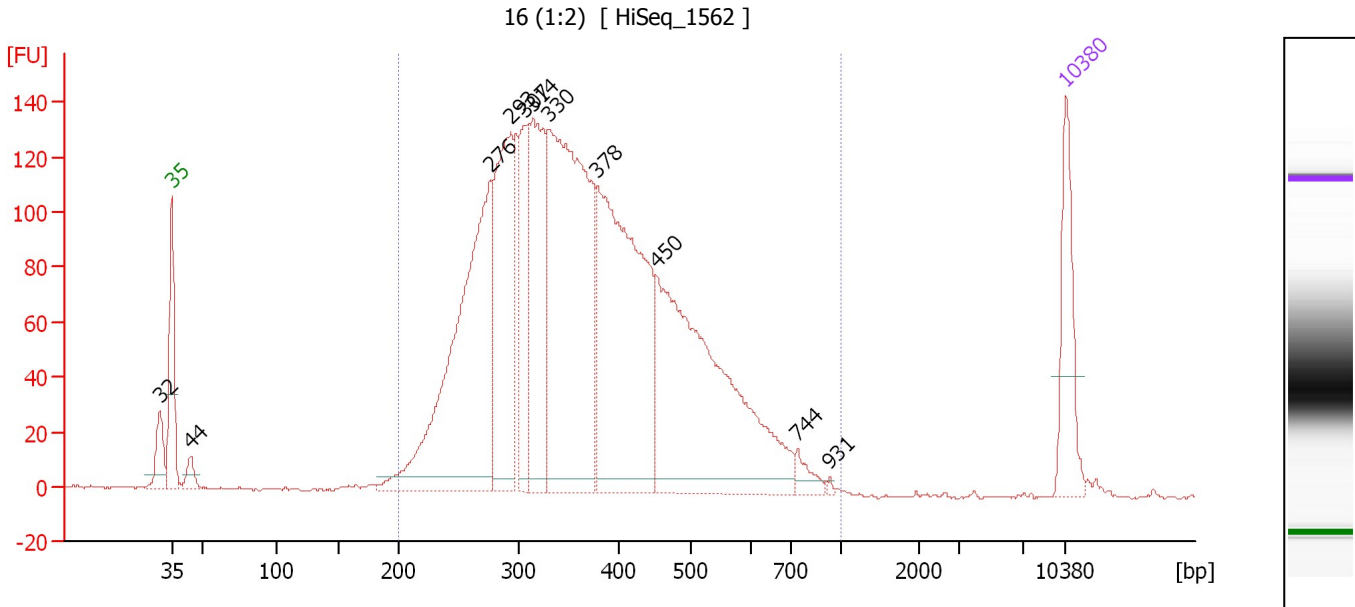
Region table for sample 4 : 15

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	379	1,200.11	1,325.3	5,272.3	88	27.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 16 (1:2)

Number of peaks found: 11 Corr. Area 1: 3,203.4
 Noise: 0.4

Peak table for sample 5 : 16 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.06
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	22.29	762.1		44.49
4	276	526.46	2,885.9		67.92
5	293	273.88	1,414.5		69.50
6	307	128.45	634.9		70.64
7	314	236.83	1,142.6		71.24
8	330	579.78	2,664.5		72.48
9	378	486.14	1,949.4		76.29
10	450	490.71	1,651.0		80.90
11	744	18.99	38.7		92.00
12	931	2.15	3.5		94.52
13	10,380	75.00	10.9	Upper Marker	113.00

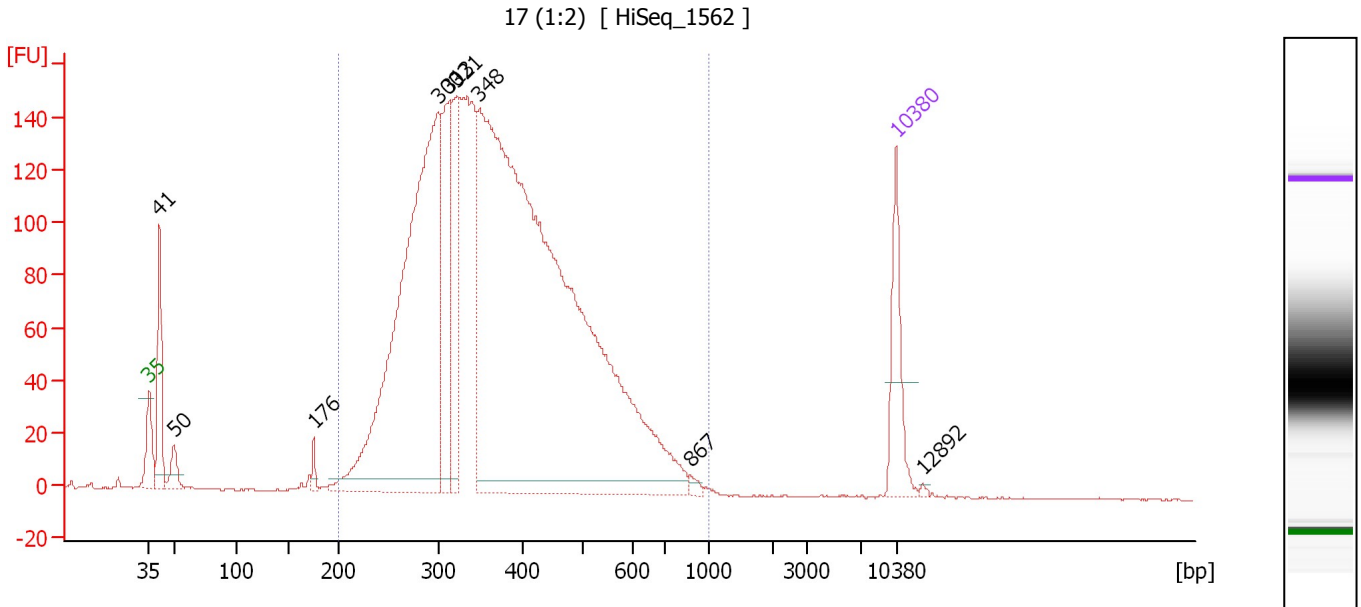
Region table for sample 5 : 16 (1:2)

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	378	2,755.87	3,203.4	12,228.7	97	29.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 17 (1:2)

Number of peaks found: 9 Corr. Area 1: 3,522.6
 Noise: 0.3

Peak table for sample 6 : 17 (1:2)

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	41	145.00	5,365.6		43.95
3	50	37.31	1,137.3		45.35
4	176	15.57	134.3		58.44
5	300	947.04	4,790.6		70.08
6	313	175.81	851.9		71.13
7	321	198.08	935.3		71.78
8	348	1,964.92	8,554.8		73.93
9	867	7.26	12.7		93.66
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,892	0.00	0.0		115.50

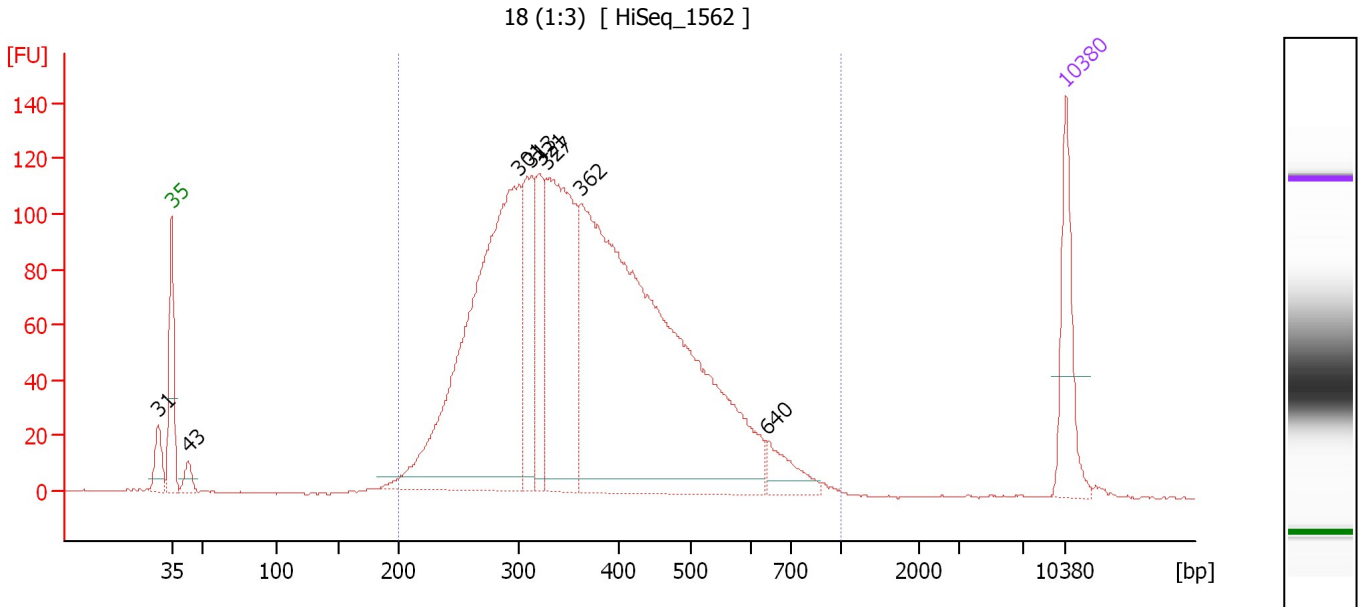
Region table for sample 6 : 17 (1:2)

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	384	3,446.96	3,522.6	14,978.5	95	28.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 18 (1:3)

Number of peaks found: 8 Corr. Area 1: 2,695.9
 Noise: 0.3

Peak table for sample 7 : 18 (1:3)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.97
2	35	125.00	5,411.3	Lower Marker	43.00
3	43	22.94	806.9		44.29
4	301	742.59	3,736.1		70.22
5	313	149.14	722.2		71.14
6	321	116.19	547.9		71.81
7	327	374.08	1,732.3		72.28
8	362	1,059.99	4,432.6		75.06
9	640	42.51	100.7		89.60
10	10,380	75.00	10.9	Upper Marker	113.00

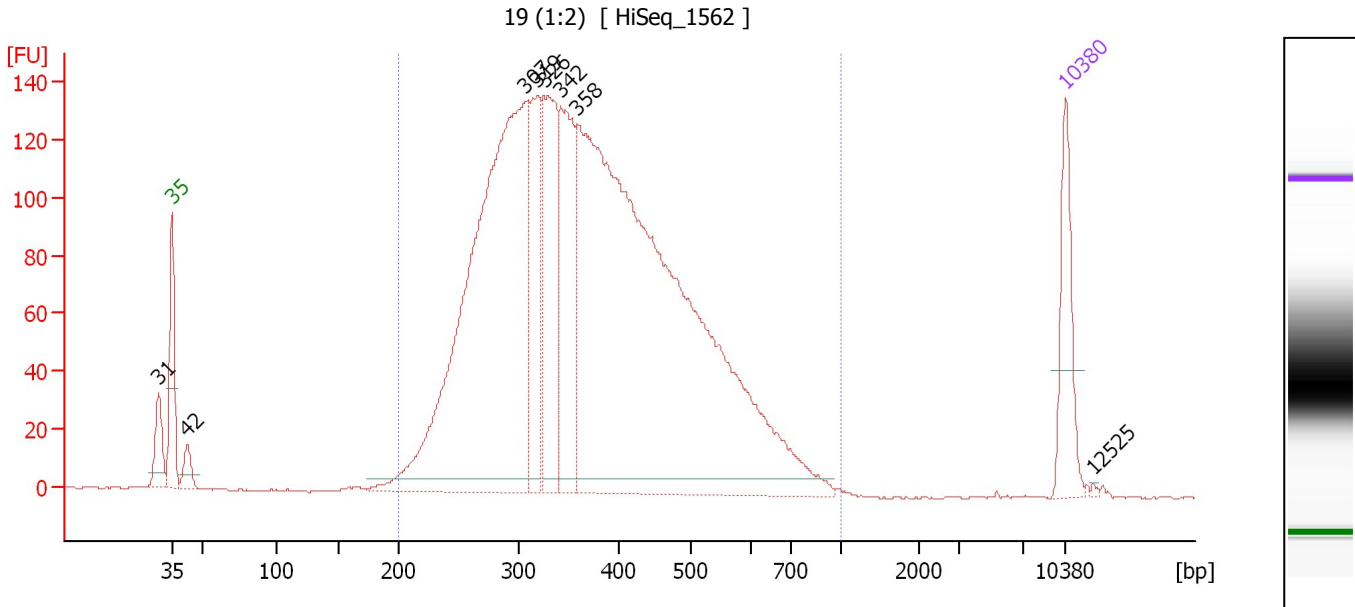
Region table for sample 7 : 18 (1:3)

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	378	2,450.67	2,695.9	10,843.2	97	28.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 19 (1:2)

Number of peaks found: 8 Corr. Area 1: 3,249.5
 Noise: 0.3

Peak table for sample 8 : 19 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.96
2	35	125.00	5,411.3	Lower Marker	43.00
3	42	30.90	1,101.6		44.20
4	307	1,001.99	4,943.5		70.69
5	319	162.35	771.3		71.62
6	326	234.10	1,089.7		72.14
7	342	225.35	998.6		73.45
8	358	1,498.40	6,335.4		74.75
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,525	0.00	0.0		115.13

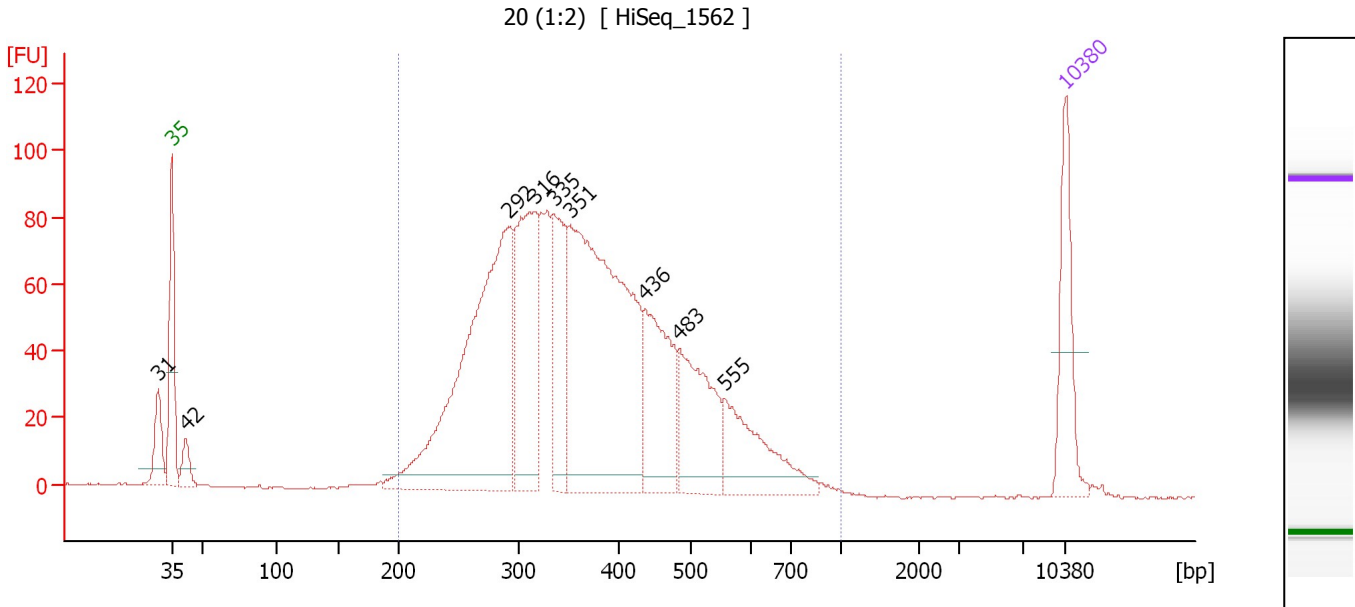
Region table for sample 8 : 19 (1:2)

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	381	2,998.94	3,249.5	13,173.3	97	28.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 20 (1:2)

Number of peaks found: 9 Corr. Area 1: 1,949.7
 Noise: 0.3

Peak table for sample 9 : 20 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.95
2	35	125.00	5,411.3	Lower Marker	43.00
3	42	31.91	1,153.7		44.10
4	292	538.03	2,793.3		69.36
5	316	237.75	1,139.2		71.41
6	335	134.02	605.3		72.93
7	351	551.70	2,379.1		74.19
8	436	158.24	550.2		80.07
9	483	144.10	452.0		82.75
10	555	114.19	312.0		86.27
11	10,380	75.00	10.9	Upper Marker	113.00

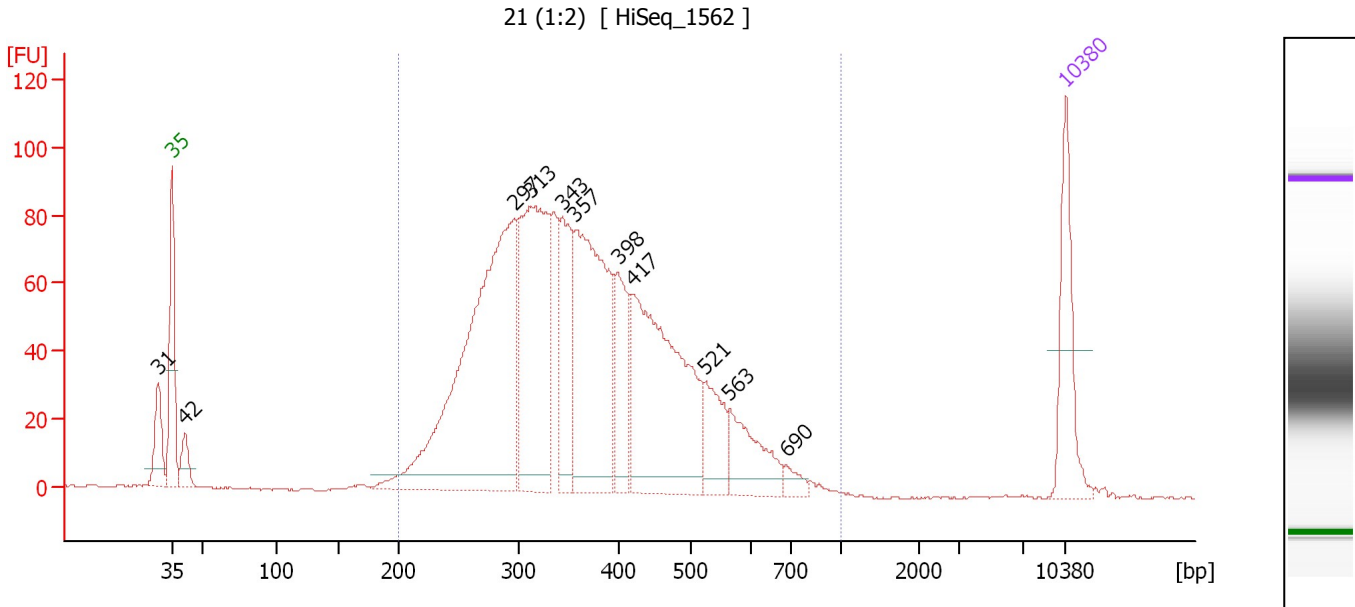
Region table for sample 9 : 20 (1:2)

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	378	1,986.04	1,949.7	8,765.0	96	28.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 21 (1:2)

Number of peaks found: 11 Corr. Area 1: 1,917.6
 Noise: 0.2

Peak table for sample 10 : 21 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.95
2	35	125.00	5,411.3	Lower Marker	43.00
3	42	34.28	1,248.6		44.05
4	297	591.29	3,020.3		69.81
5	313	319.83	1,550.0		71.13
6	343	124.94	551.5		73.55
7	357	307.35	1,306.2		74.60
8	398	91.31	347.3		77.92
9	417	316.99	1,150.9		79.03
10	521	65.09	189.1		84.72
11	563	74.55	200.7		86.66
12	690	13.66	30.0		91.09
13	10,380	75.00	10.9	Upper Marker	113.00

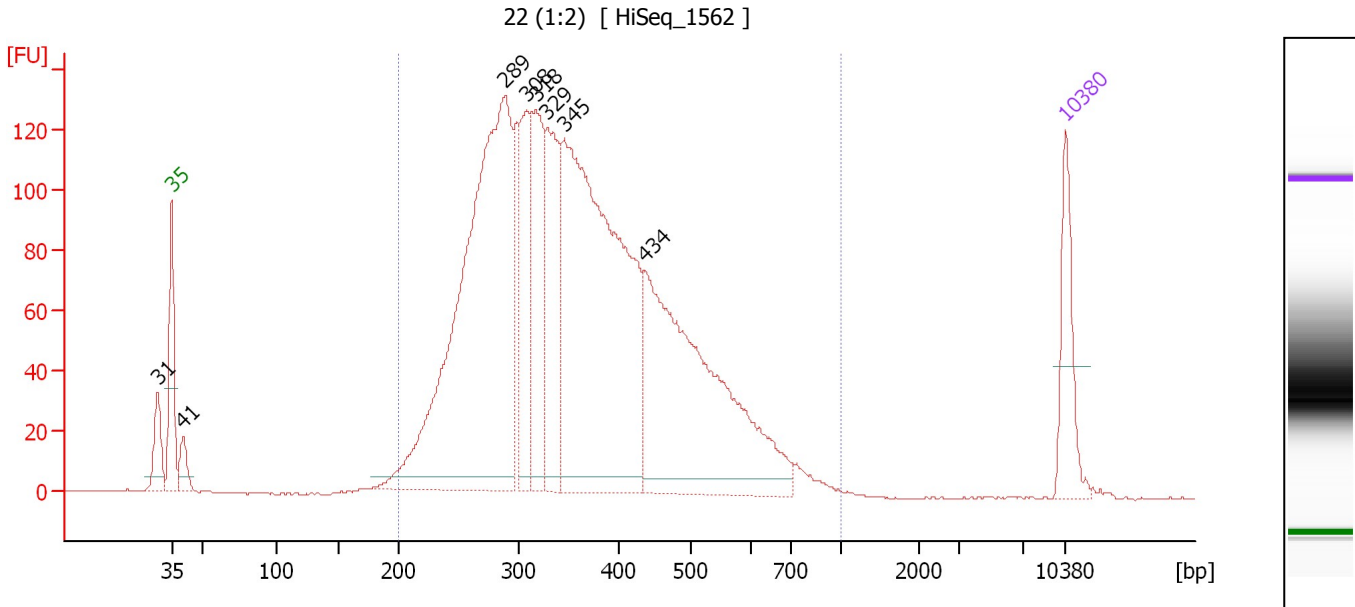
Region table for sample 10 : 21 (1:2)

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	374	1,997.60	1,917.6	8,872.2	96	27.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
 Modified: 1/18/2019 5:02:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 22 (1:2)

Number of peaks found: 8 Corr. Area 1: 2,906.8
 Noise: 0.3

Peak table for sample 11 : 22 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.88
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	39.42	1,469.2		43.90
4	289	954.64	5,008.5		69.08
5	308	191.59	941.8		70.78
6	318	196.61	937.9		71.52
7	329	209.66	965.5		72.42
8	345	843.34	3,702.5		73.70
9	434	566.02	1,976.6		79.97
10	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : 22 (1:2)

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	369	3,026.49	2,906.8	13,728.3	96	29.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-01-18\2019-01-18_002.xad

Created: 1/18/2019 4:22:05 PM
Modified: 1/18/2019 5:02:30 PM

Gel Image

