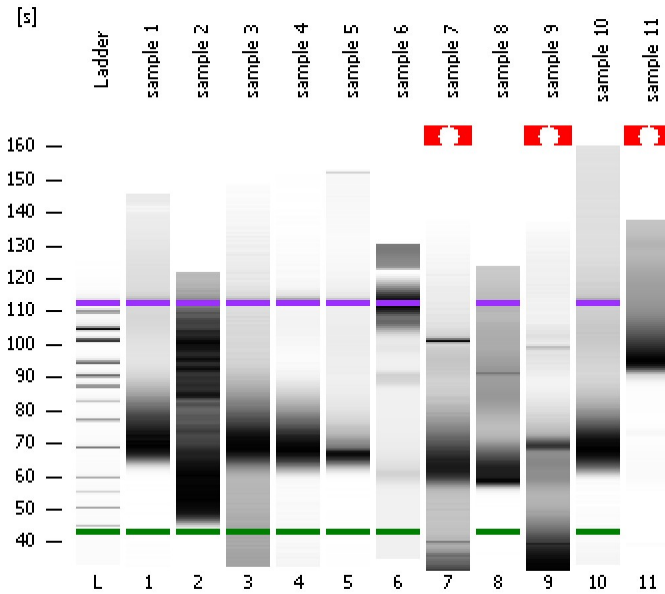


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
Modified: 8/2/2018 2:28:06 PM

Electrophoresis File Run Summary



Instrument Information:

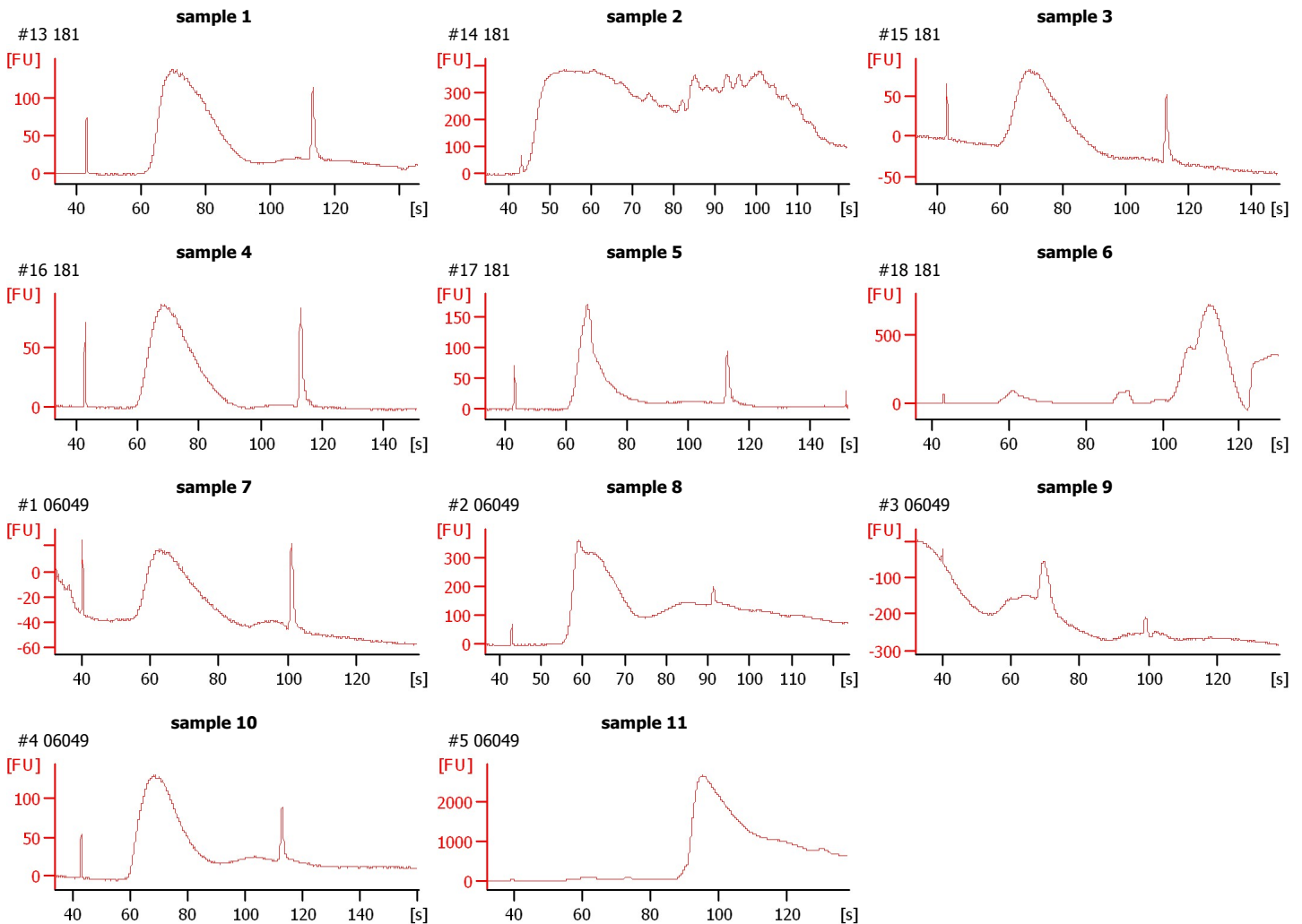
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1	#13 181	<input type="checkbox"/>	✓			
sample 2	#14 181	<input type="checkbox"/>	✓			
sample 3	#15 181	<input type="checkbox"/>	✓			
sample 4	#16 181	<input type="checkbox"/>	✓			
sample 5	#17 181	<input type="checkbox"/>	✓			
sample 6	#18 181	<input type="checkbox"/>	✓			
sample 7	#1 06049	<input type="checkbox"/>	✓			
sample 8	#2 06049	<input type="checkbox"/>	✓			
sample 9	#3 06049	<input type="checkbox"/>	✓			
sample 10	#4 06049	<input type="checkbox"/>	✓			
sample 11	#5 06049	<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\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
Modified: 8/2/2018 2:28:06 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

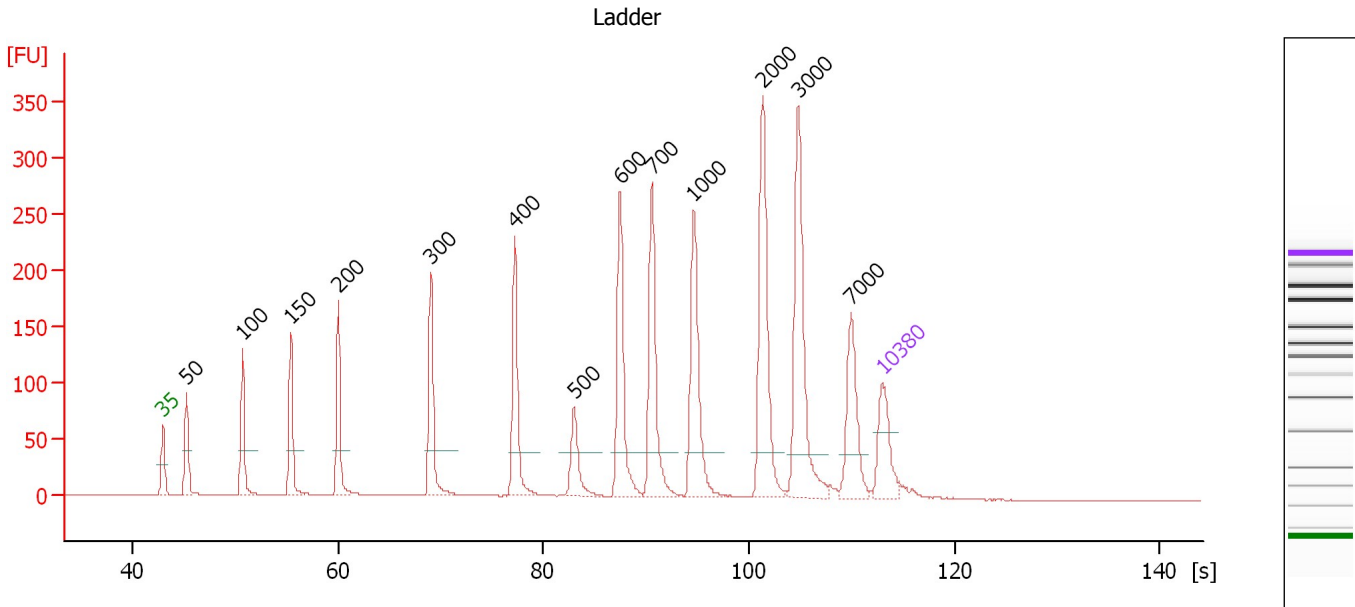
Ladder

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\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

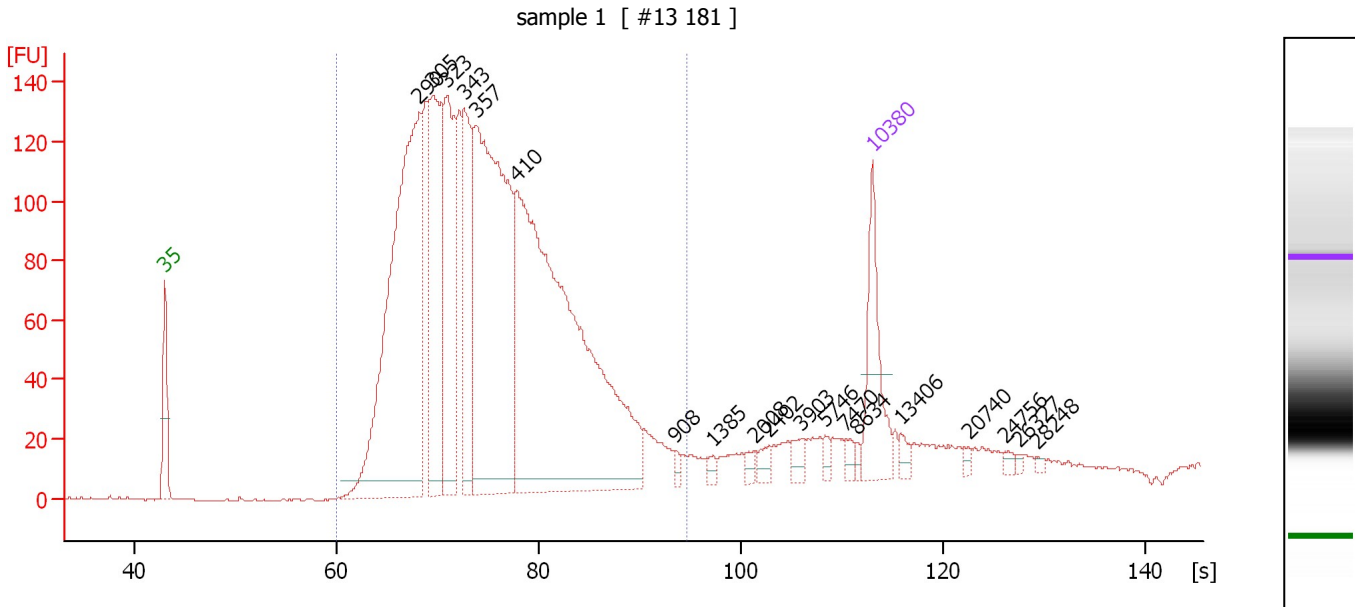
Peak table for Ladder

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	45.30
3	100	150.00	2,272.7	Ladder Peak	50.74
4	150	150.00	1,515.2	Ladder Peak	55.44
5	200	150.00	1,136.4	Ladder Peak	60.04
6	300	150.00	757.6	Ladder Peak	69.09
7	400	150.00	568.2	Ladder Peak	77.24
8	500	150.00	454.5	Ladder Peak	82.99
9	600	150.00	378.8	Ladder Peak	87.49
10	700	150.00	324.7	Ladder Peak	90.57
11	1,000	150.00	227.3	Ladder Peak	94.65
12	2,000	150.00	113.6	Ladder Peak	101.34
13	3,000	150.00	75.8	Ladder Peak	104.84
14	7,000	150.00	32.5	Ladder Peak	109.92
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 19 Corr. Area 1: 3,033.7
 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	290	659.13	3,444.8		68.17
3	305	245.87	1,221.0		69.50
4	323	230.78	1,083.6		70.94
5	343	162.20	716.8		72.58
6	357	558.95	2,370.9		73.75
7	410	812.02	2,997.8		77.84
8	908	6.49	10.8		93.40
9	1,385	6.83	7.5		97.23
10	2,008	6.85	5.2		101.37
11	2,402	9.74	6.1		102.75
12	3,903	12.46	4.8		105.99
13	5,746	6.64	1.8		108.33
14	7,470	8.04	1.6		110.34
15	8,634	4.92	0.9		111.41
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,406	0.00	0.0		115.76
18	20,740	0.00	0.0		122.45
19	24,756	0.00	0.0		126.12
20	26,327	0.00	0.0		127.55
21	28,248	0.00	0.0		129.31

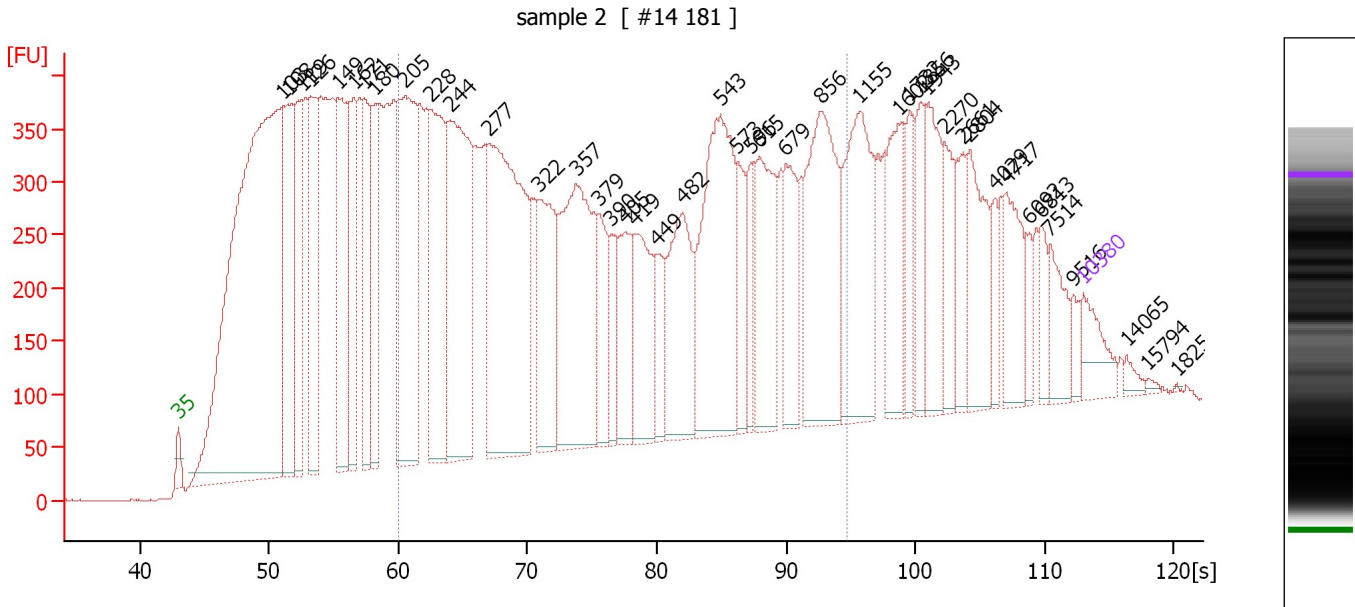
Region table for sample 1 : sample 1

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	388	2,811.48	3,033.7	12,131.4	91	30.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 43 Corr. Area 1: 13,252.5
 Noise: 0.9

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	103	3,006.37	44,064.5		51.05
3	108	529.08	7,437.4		51.47
4	119	377.89	4,801.0		52.55
5	126	504.70	6,053.8		53.21
6	149	607.61	6,186.2		55.33
7	162	323.25	3,017.2		56.58
8	171	354.57	3,143.4		57.37
9	180	276.05	2,318.7		58.24
10	205	764.71	5,644.0		60.52
11	228	559.49	3,721.6		62.56
12	244	796.22	4,947.3		64.01
13	277	1,039.16	5,676.6		67.04
14	322	369.05	1,735.2		70.90
15	357	665.60	2,822.0		73.77
16	379	168.28	673.2		75.51
17	390	111.90	434.2		76.46
18	405	197.68	739.1		77.54
19	419	255.75	924.9		78.33
20	449	104.56	352.6		80.08
21	482	340.05	1,067.8		81.99
22	543	612.24	1,707.8		84.93
23	573	120.44	318.6		86.26
24	596	96.50	245.4		87.30
25	615	292.17	719.3		87.96

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	679	193.65	432.3		89.92
27	856	474.60	839.8		92.70
28	1,155	376.08	493.4		95.69
29	1,602	186.64	176.6		98.68
30	1,732	90.31	79.0		99.55
31	1,856	107.92	88.1		100.38
32	1,943	169.62	132.3		100.96
33	2,270	102.16	68.2		102.29
34	2,661	97.99	55.8		103.66
35	2,804	173.95	94.0		104.16
36	4,029	53.22	20.0		106.15
37	4,717	141.16	45.3		107.02
38	6,092	37.60	9.3		108.77
39	6,813	51.74	11.5		109.68
40	7,514	88.32	17.8		110.38
41	9,516	30.45	4.8		112.21
42	10,380	75.00	10.9	Upper Marker	113.00
43	14,065	0.00	0.0		116.36
44	15,794	0.00	0.0		117.94
45	18,251	0.00	0.0		120.18

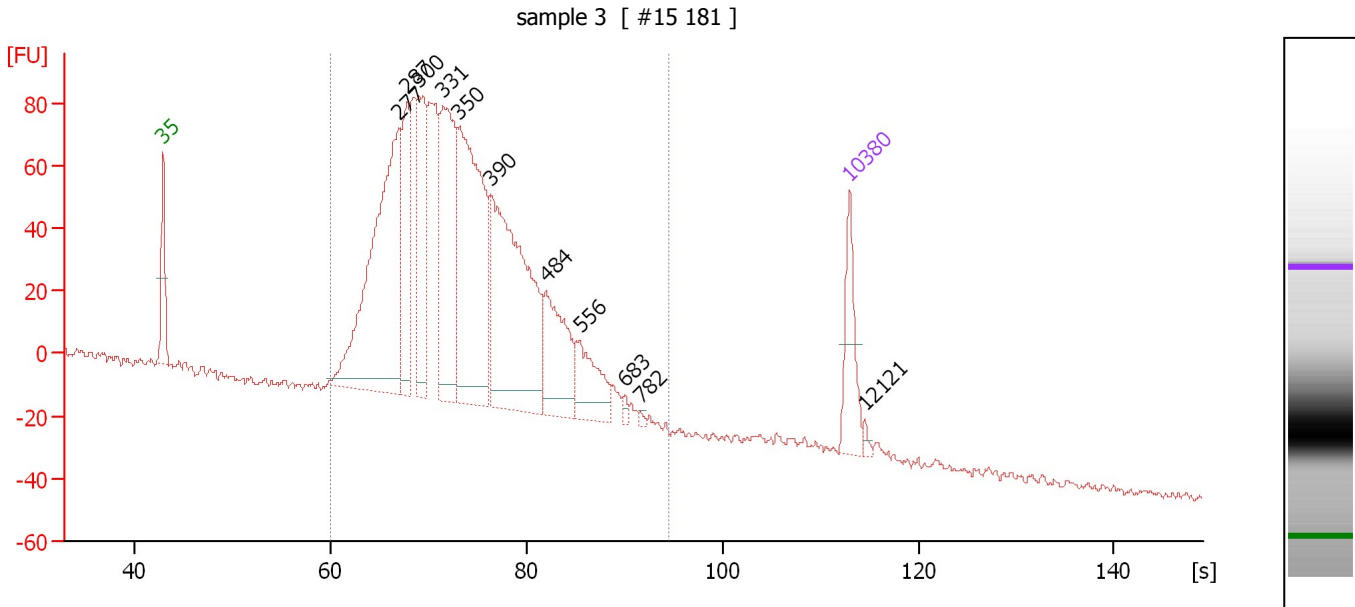
Region table for sample 2 : sample 2

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	442	8,189.37	13,252.4	36,972.6	47	45.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 11 Corr. Area 1: 2,101.9
 Noise: 1.2

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	277	614.78	3,357.5		67.05
3	287	168.18	887.5		67.92
4	300	194.22	979.3		69.13
5	331	327.51	1,500.4		71.59
6	350	466.22	2,021.0		73.13
7	390	481.79	1,872.6		76.41
8	484	155.02	485.6		82.05
9	556	91.40	249.1		85.50
10	683	7.89	17.5		90.05
11	782	3.85	7.5		91.69
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,121	0.00	0.0		114.59

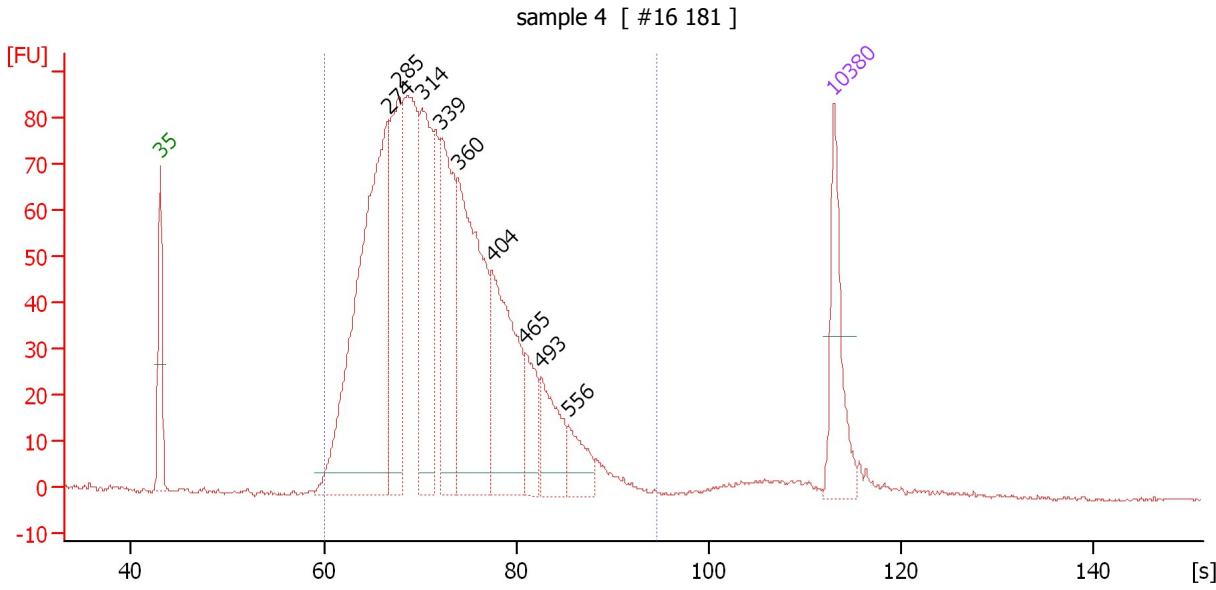
Region table for sample 3 : sample 3

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	366	2,952.69	2,101.9	13,380.9	97	27.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 9 Corr. Area 1: 1,786.0
 Noise: 0.3

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	274	546.26	3,024.3		66.71
3	285	199.60	1,059.7		67.76
4	314	204.05	984.9		70.22
5	339	191.29	856.2		72.23
6	360	294.26	1,239.5		73.96
7	404	193.98	727.6		77.47
8	465	53.54	174.4		80.98
9	493	71.76	220.5		82.60
10	556	37.89	103.3		85.50
11	10,380	75.00	10.9	Upper Marker	113.00

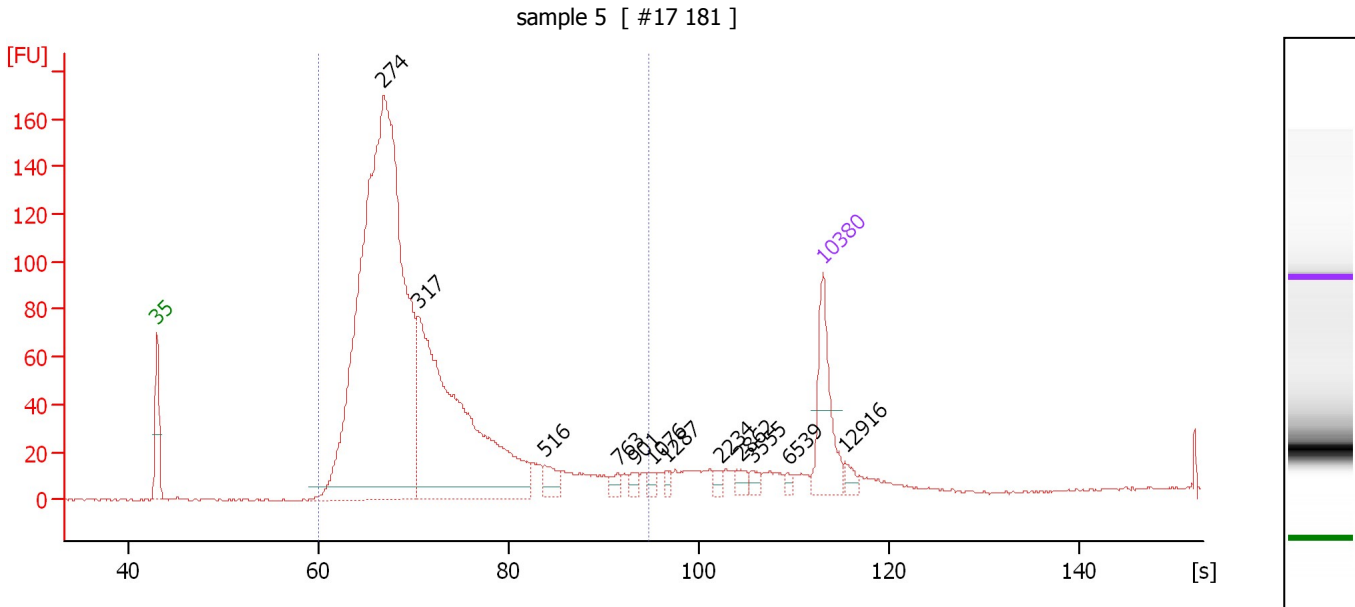
Region table for sample 4 : sample 4

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	347	2,130.81	1,786.0	10,106.7	98	26.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 12 Corr. Area 1: 1,616.6
 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	274	1,302.29	7,192.4		66.77
3	317	582.88	2,790.0		70.44
4	516	22.53	66.2		83.70
5	763	11.07	22.0		91.44
6	901	8.56	14.4		93.30
7	1,076	7.55	10.6		95.16
8	1,287	5.47	6.4		96.57
9	2,234	6.35	4.3		102.16
10	2,862	8.67	4.6		104.36
11	3,555	7.59	3.2		105.55
12	6,539	4.31	1.0		109.33
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,916	0.00	0.0		115.31

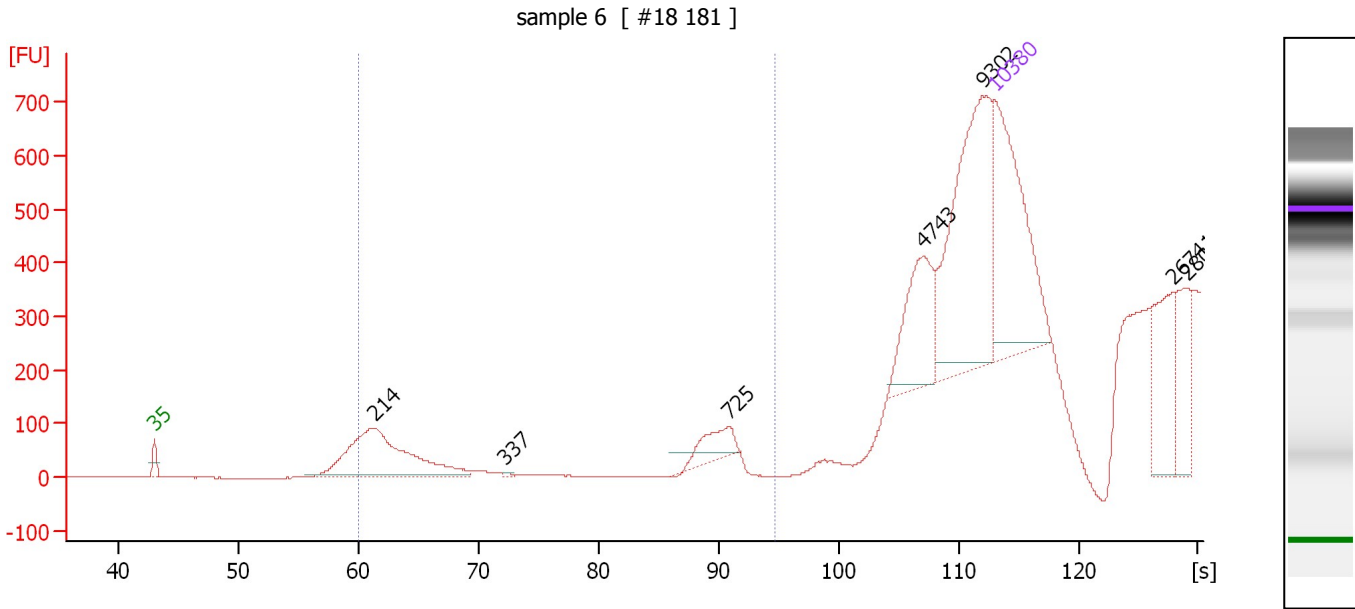
Region table for sample 5 : sample 5

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	299	1,623.44	1,616.6	8,500.6	100	17.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 7 Corr. Area 1: 0.0
 Noise: 0.6

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	214	100.76	712.7		61.33
3	337	0.77	3.5		72.10
4	725	17.26	36.1		90.92
5	4,743	41.97	13.4		107.05
6	9,302	106.23	17.3		112.02
7	10,380	75.00	10.9	Upper Marker	113.00
8	26,741	0.00	0.0		127.93
9	28,014	0.00	0.0		129.09

Region table for sample 6 : sample 6

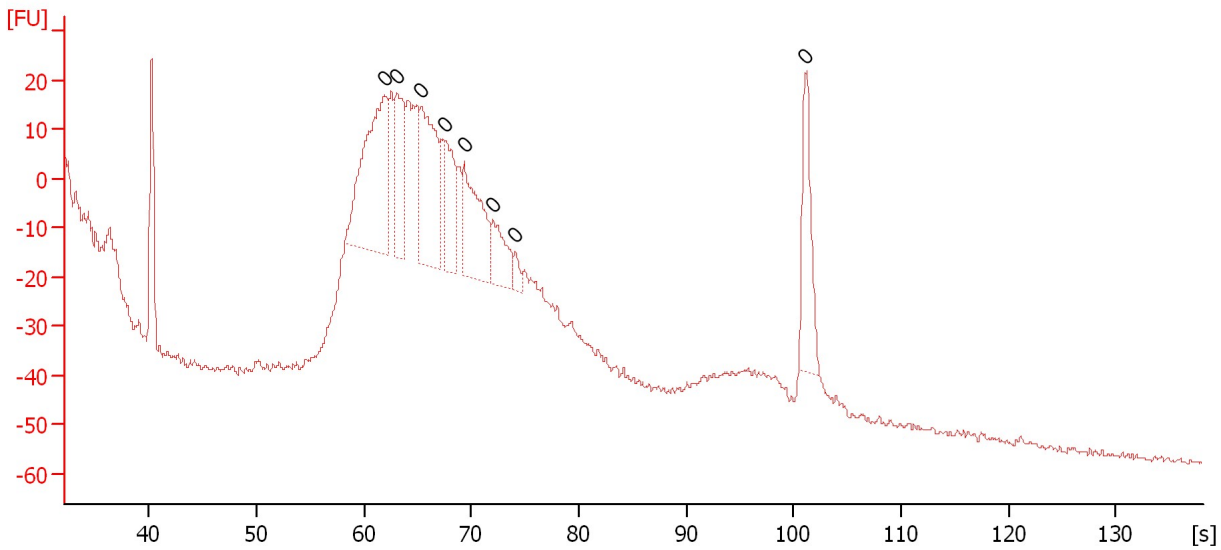
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	0	0.00	0.0	0.0	0	0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...

sample 7 [#1 06049]



Overall Results for sample 7 : sample 7

Number of peaks found: 0 Noise: 0.7

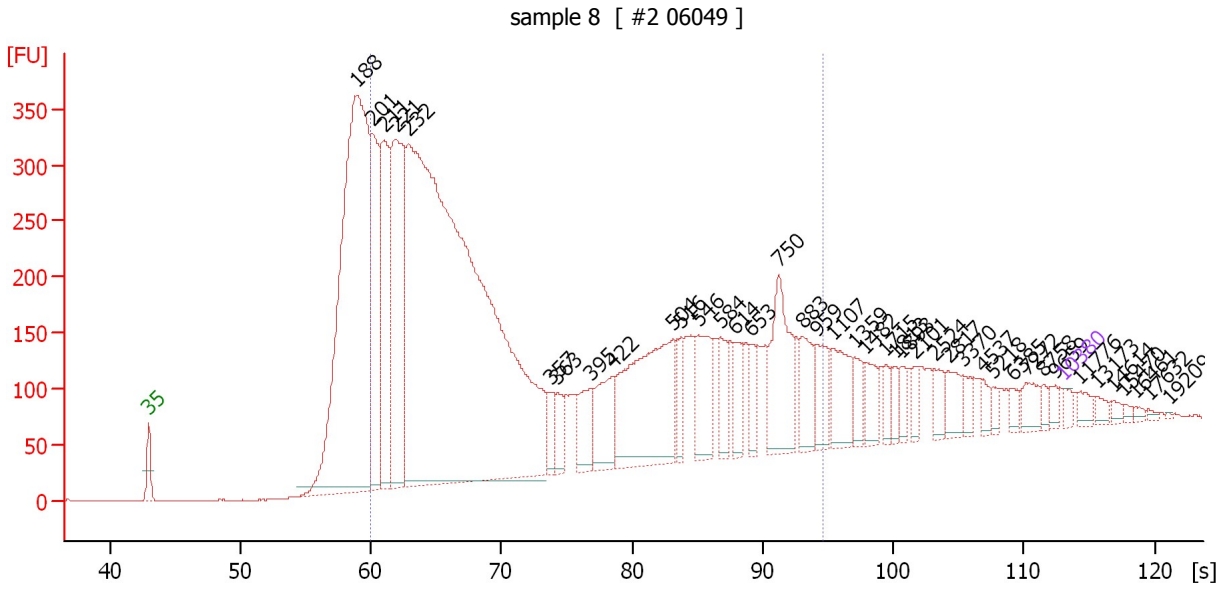
Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		61.95
2	0	0.00	0.0		63.05
3	0	0.00	0.0		65.35
4	0	0.00	0.0		67.55
5	0	0.00	0.0		69.35
6	0	0.00	0.0		72.00
7	0	0.00	0.0		74.05
8	0	0.00	0.0		101.10

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 41 Corr. Area 1: 7,470.6
 Noise: 0.6

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	188	9,223.48	74,469.4		58.91
3	201	2,008.68	15,169.8		60.10
4	211	2,274.56	16,327.0		61.04
5	221	3,367.04	23,123.4		61.91
6	232	18,024.54	117,953.1		62.89
7	357	268.50	1,140.8		73.70
8	363	291.13	1,214.6		74.24
9	395	513.22	1,969.0		76.83
10	422	706.64	2,536.4		78.51
11	504	2,355.90	7,086.7		83.16
12	516	328.50	963.7		83.73
13	546	781.83	2,170.6		85.05
14	584	385.90	1,000.9		86.78
15	614	362.92	895.3		87.93
16	653	240.93	559.2		89.12
17	750	1,096.69	2,214.7		91.26
18	883	449.71	771.4		93.06
19	959	401.13	633.8		94.09
20	1,107	547.90	749.9		95.37
21	1,359	226.37	252.4		97.05
22	1,482	267.61	273.7		97.87
23	1,715	131.68	116.3		99.44
24	1,813	117.90	98.5		100.09
25	1,893	141.45	113.2		100.63

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...

... Peak table for sample 8 : sample 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,101	110.87	79.9		101.70
27	2,524	196.22	117.8		103.18
28	2,817	225.32	121.2		104.20
29	3,370	127.15	57.2		105.31
30	4,537	101.84	34.0		106.79
31	5,218	66.72	19.4		107.66
32	6,385	89.56	21.3		109.14
33	7,272	188.32	39.2		110.16
34	8,758	68.38	11.8		111.52
35	9,659	76.18	11.9		112.34
36	10,380	75.00	10.9	Upper Marker	113.00
37	11,776	0.00	0.0		114.27
38	13,173	0.00	0.0		115.55
39	14,614	0.00	0.0		116.86
40	15,470	0.00	0.0		117.64
41	16,461	0.00	0.0		118.55
42	17,632	0.00	0.0		119.62
43	19,209	0.00	0.0		121.06

Region table for sample 8 : sample 8

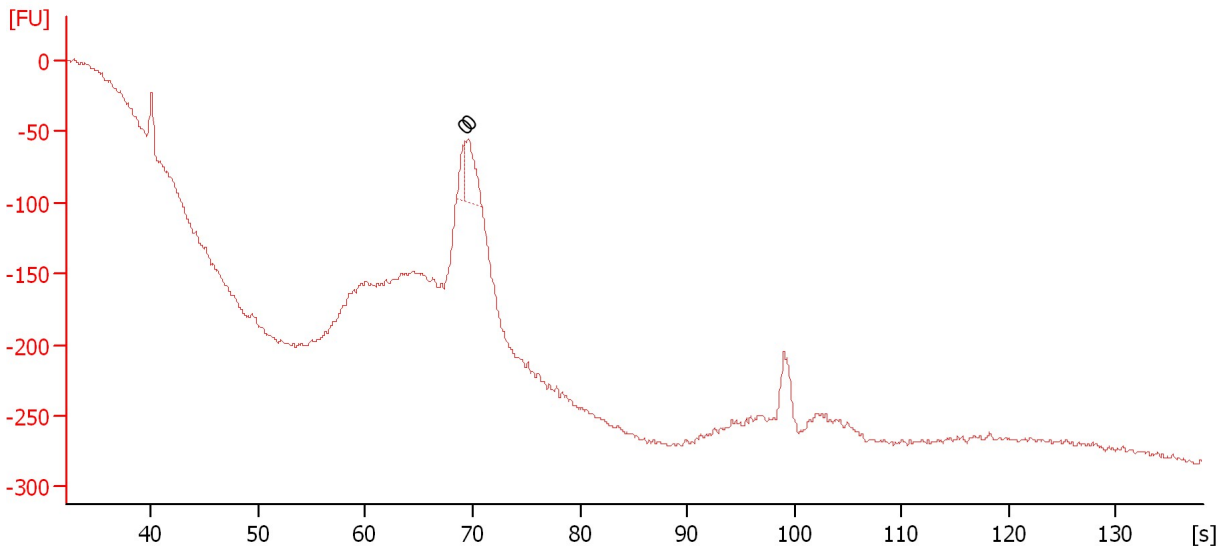
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	391	31,874.20	7,470.6	161,803.7	72	49.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...

sample 9 [#3 06049]



Overall Results for sample 9 : sample 9

Number of peaks found: 0 Noise: 1.9

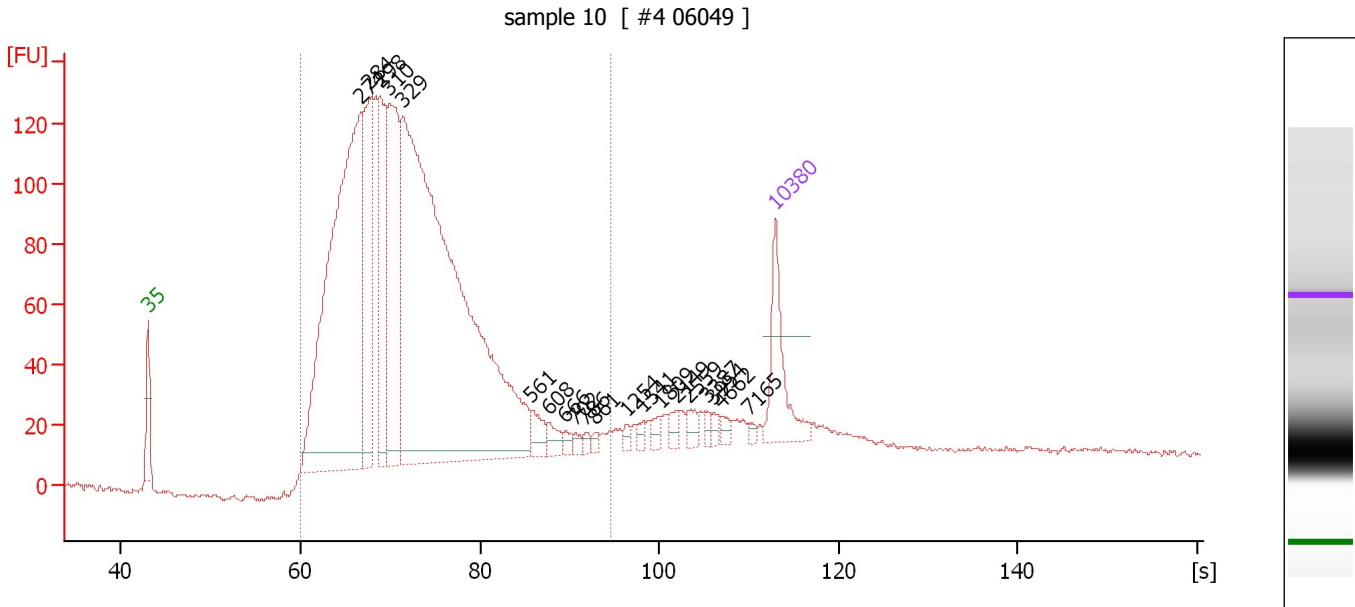
Peak table for sample 9 : sample 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		69.25
2	0	0.00	0.0		69.60

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
 Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 20 Corr. Area 1: 2,688.7
 Noise: 0.7

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	274	853.74	4,713.9		66.77
3	284	254.77	1,357.6		67.67
4	298	161.61	822.8		68.87
5	310	306.52	1,499.1		69.89
6	329	1,353.78	6,236.6		71.44
7	561	26.40	71.2		85.75
8	608	17.14	42.7		87.73
9	666	9.03	20.5		89.53
10	702	7.00	15.1		90.60
11	786	6.17	11.9		91.74
12	861	5.90	10.4		92.76
13	1,254	6.26	7.6		96.35
14	1,541	7.84	7.7		98.27
15	1,809	8.46	7.1		100.07
16	2,149	10.65	7.5		101.86
17	2,559	12.12	7.2		103.30
18	3,387	6.65	3.0		105.34
19	3,954	7.13	2.7		106.05
20	4,662	7.41	2.4		106.95
21	7,165	4.04	0.9		110.07
22	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...

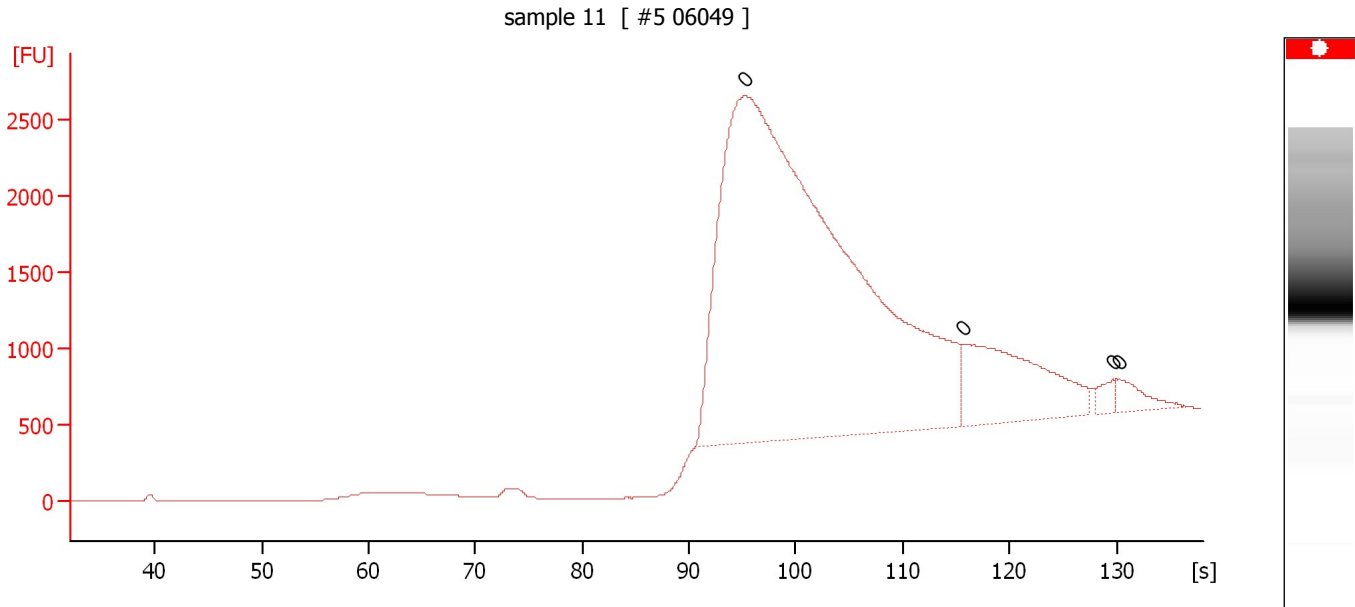
... Region table for sample 10 : sample 10

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	355	3,278.16	2,688.7	15,612.7	 87	34.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
Modified: 8/2/2018 2:28:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 0 Noise: 0.8

Peak table for sample 11 : sample 11

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		95.25
2	0	0.00	0.0		115.60
3	0	0.00	0.0		129.65
4	0	0.00	0.0		130.20

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02_002.xad

Created: 8/2/2018 1:46:49 PM
Modified: 8/2/2018 2:28:06 PM

Gel Image

