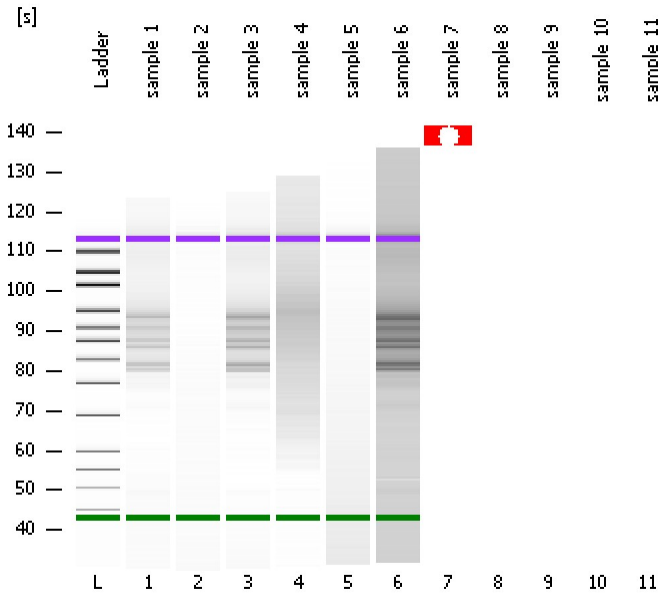


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
Modified: 4/20/2018 4:35:54 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

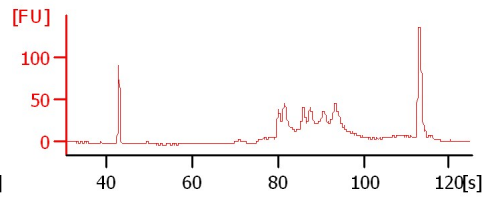
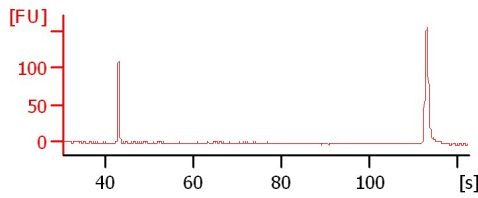
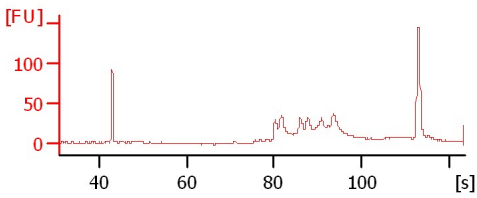
Chip Information:

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

sample 1

sample 2

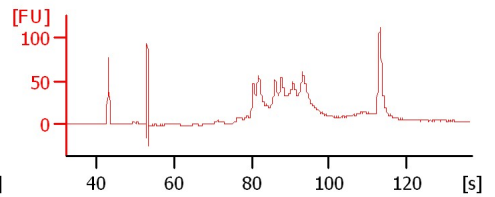
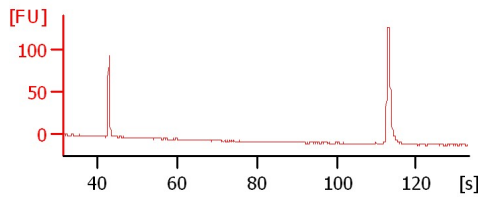
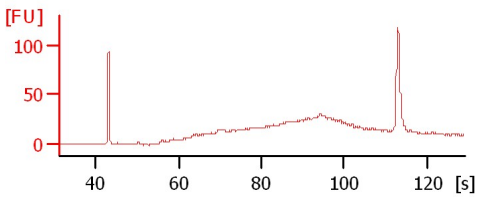
sample 3



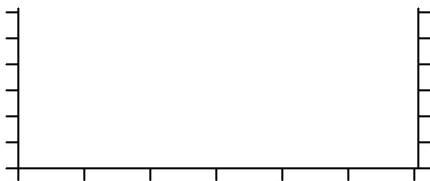
sample 4

sample 5

sample 6



sample 7



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
Modified: 4/20/2018 4:35:54 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 7		<input type="checkbox"/>	✗			
sample 8		<input type="checkbox"/>	✗			
sample 9		<input type="checkbox"/>	✗			
sample 10		<input type="checkbox"/>	✗			
sample 11		<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\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
Modified: 4/20/2018 4:35:54 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

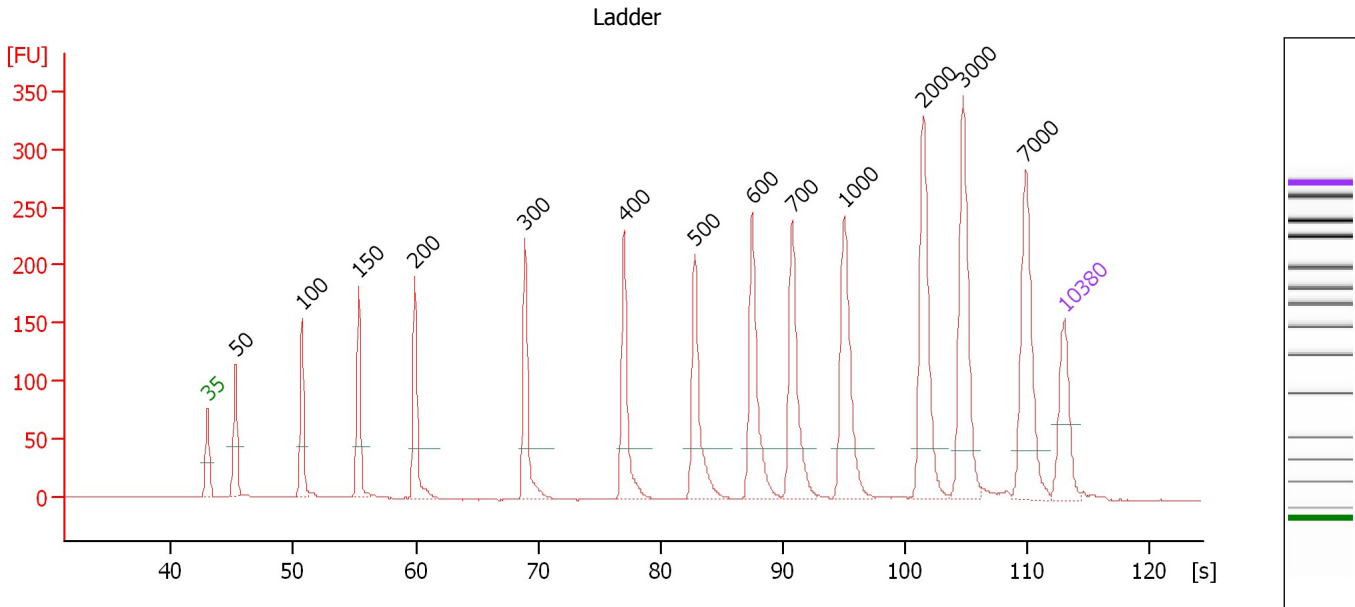
**Ladder**

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\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

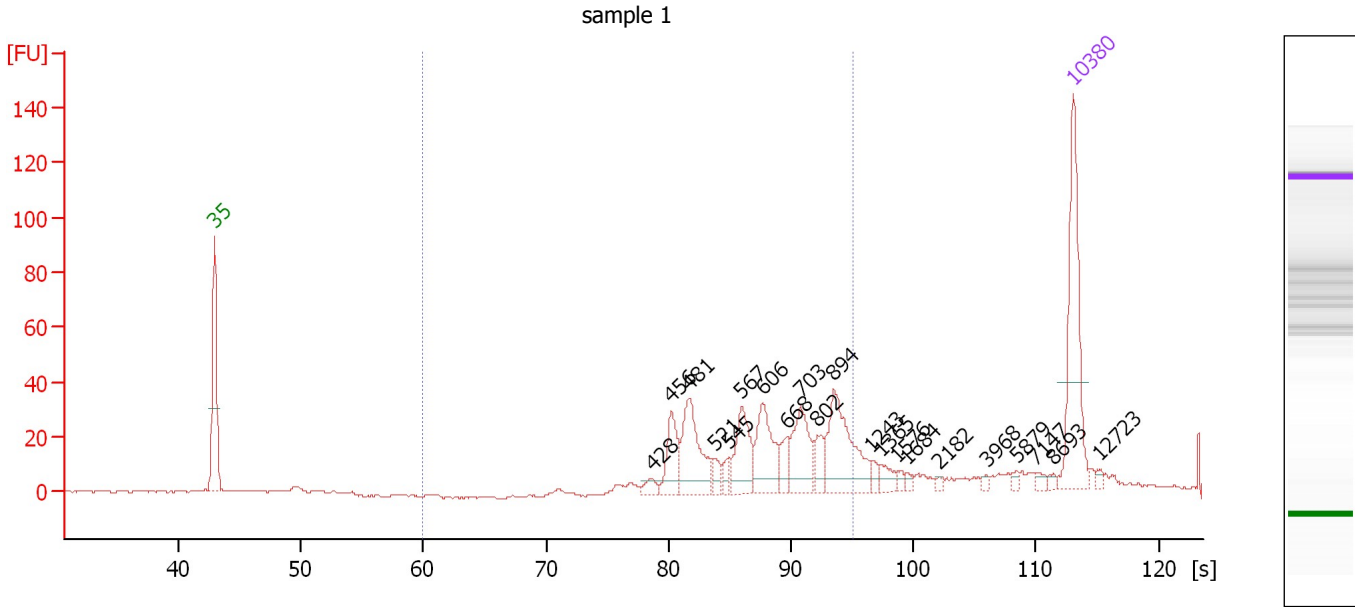
**Peak table for Ladder**

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	45.28
3	100	150.00	2,272.7	Ladder Peak	50.72
4	150	150.00	1,515.2	Ladder Peak	55.33
5	200	150.00	1,136.4	Ladder Peak	59.94
6	300	150.00	757.6	Ladder Peak	68.94
7	400	150.00	568.2	Ladder Peak	77.01
8	500	150.00	454.5	Ladder Peak	82.81
9	600	150.00	378.8	Ladder Peak	87.50
10	700	150.00	324.7	Ladder Peak	90.75
11	1,000	150.00	227.3	Ladder Peak	95.01
12	2,000	150.00	113.6	Ladder Peak	101.46
13	3,000	150.00	75.8	Ladder Peak	104.71
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\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
 Modified: 4/20/2018 4:35:54 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 1**

Number of peaks found: 21                      Corr. Area 1: 381.9  
 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	428	7.90	27.9		78.66
3	456	33.19	110.4		80.23
4	481	61.63	194.0		81.72
5	521	9.88	28.8		83.78
6	545	7.50	20.8		84.92
7	567	41.35	110.4		85.97
8	606	43.59	109.1		87.68
9	668	14.08	32.0		89.70
10	703	44.24	95.3		90.79
11	802	14.51	27.4		92.19
12	894	67.86	115.0		93.51
13	1,243	4.90	6.0		96.57
14	1,365	9.27	10.3		97.36
15	1,576	3.03	2.9		98.72
16	1,684	2.68	2.4		99.42
17	2,182	2.04	1.4		102.05
18	3,968	2.15	0.8		105.95
19	5,879	2.69	0.7		108.40
20	7,147	3.66	0.8		109.98
21	8,693	2.28	0.4		111.42
22	10,380	75.00	10.9	Upper Marker	113.00
23	12,723	0.00	0.0		115.19

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
Modified: 4/20/2018 4:35:54 PM

**Electropherogram Summary Continued ...**

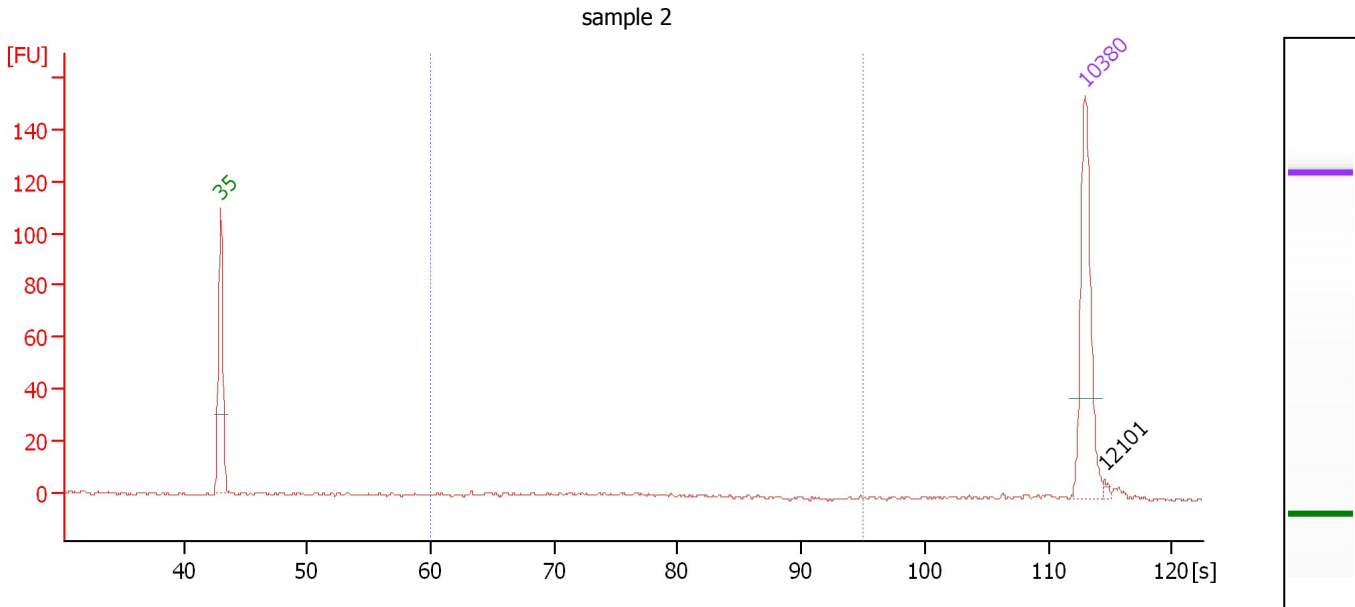
... Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ $\mu$ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	646	306.77	381.9	776.0	 76	24.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
 Modified: 4/20/2018 4:35:54 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 2**

Number of peaks found: 1                      Corr. Area 1: 19.1  
 Noise: 0.6

**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	10,380	75.00	10.9	Upper Marker	113.00
3	12,101	0.00	0.0		114.61

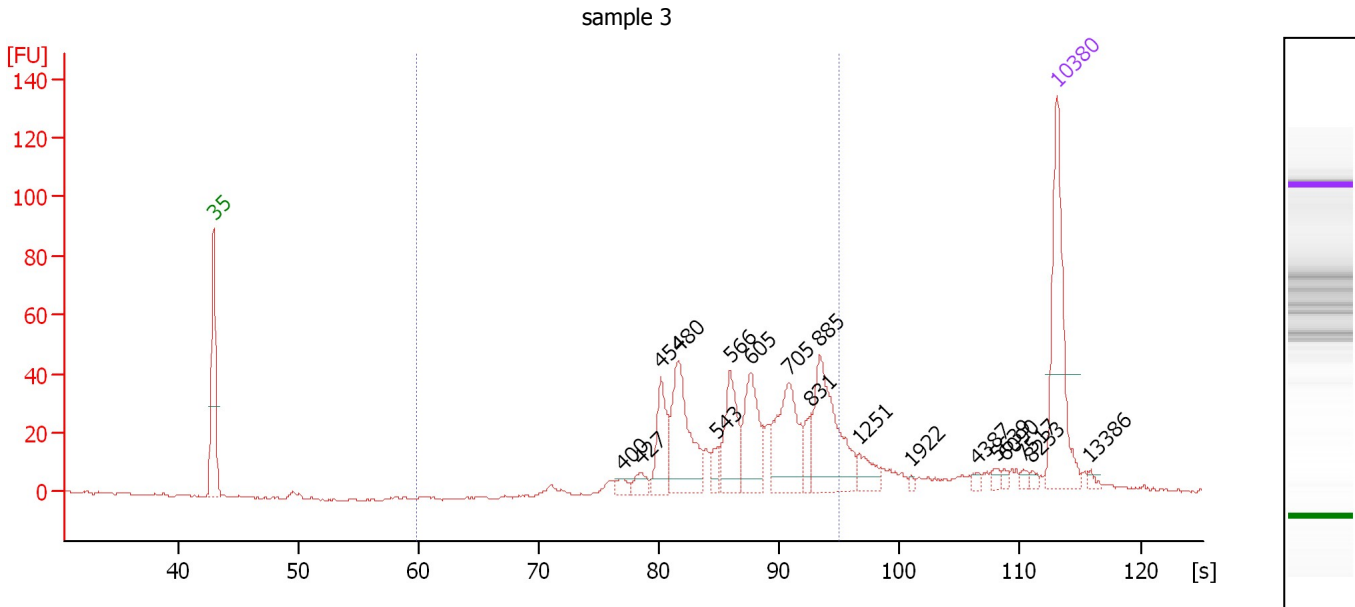
**Region table for sample 2 : sample 2**

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	380	15.84	19.1	70.5	45	31.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
 Modified: 4/20/2018 4:35:54 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 3**

Number of peaks found: 18                      Corr. Area 1: 525.7  
 Noise: 0.4

**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	400	6.65	25.2		77.04
3	427	9.97	35.4		78.56
4	454	40.00	133.4		80.16
5	480	78.89	249.1		81.64
6	543	10.95	30.5		84.85
7	566	45.05	120.5		85.92
8	605	51.33	128.6		87.66
9	705	67.53	145.0		90.83
10	831	15.39	28.1		92.61
11	885	78.99	135.3		93.37
12	1,251	14.44	17.5		96.63
13	1,922	1.68	1.3		100.95
14	4,387	2.65	0.9		106.49
15	5,639	3.76	1.0		108.09
16	6,090	2.26	0.6		108.67
17	7,517	2.88	0.6		110.32
18	8,233	2.38	0.4		110.99
19	10,380	75.00	10.9	Upper Marker	113.00
20	13,386	0.00	0.0		115.81

**Region table for sample 3 : sample 3**

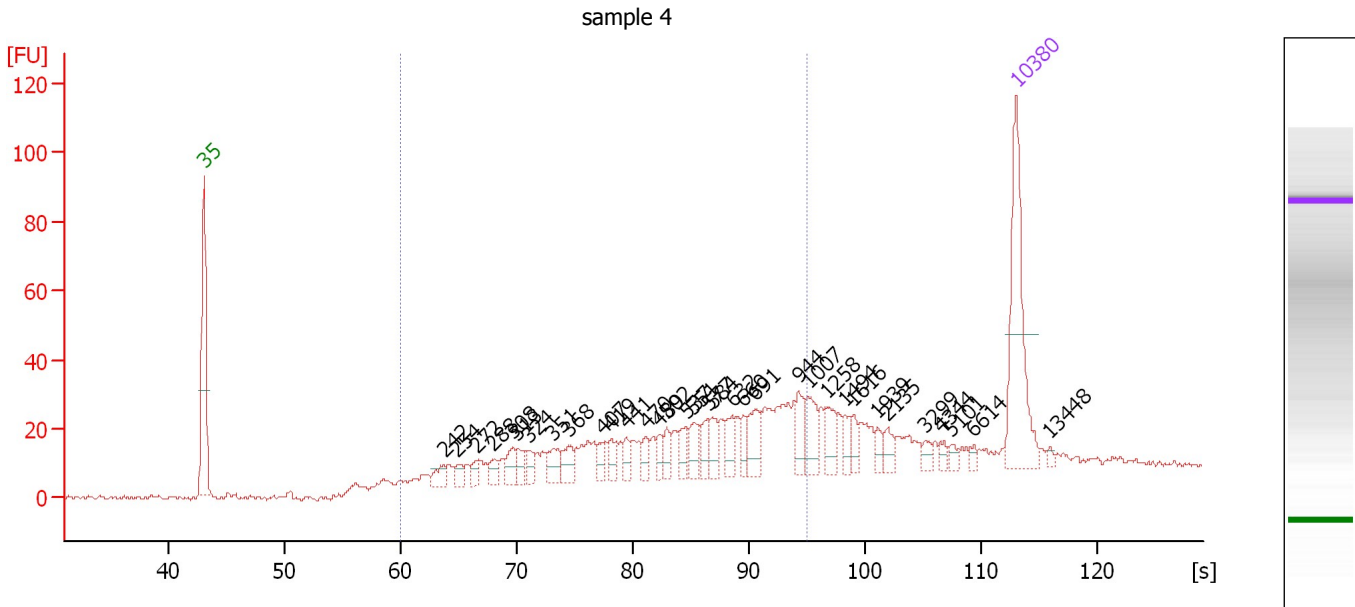
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	636	411.24	525.7	1,061.9	78	25.3



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
 Modified: 4/20/2018 4:35:54 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 4**

Number of peaks found: 34                      Corr. Area 1: 527.3  
 Noise: 0.8

**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	242	12.94	81.2		63.68
3	254	8.21	48.9		64.84
4	272	8.40	46.8		66.41
5	288	9.10	47.8		67.89
6	308	14.31	70.3		69.60
7	313	10.60	51.2		70.02
8	324	9.08	42.4		70.90
9	351	17.33	74.7		73.07
10	368	14.11	58.0		74.46
11	407	9.69	36.1		77.42
12	419	11.26	40.7		78.12
13	441	9.30	32.0		79.36
14	470	9.94	32.0		81.08
15	489	8.97	27.8		82.19
16	502	10.35	31.3		82.88
17	537	13.29	37.5		84.55
18	551	13.25	36.4		85.19
19	577	11.05	29.0		86.44
20	584	12.13	31.5		86.77
21	632	14.38	34.5		88.53
22	660	10.64	24.4		89.45
23	691	21.69	47.5		90.47
24	944	15.64	25.1		94.22
25	1,007	20.02	30.1		95.05

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
 Modified: 4/20/2018 4:35:54 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,258	15.44	18.6		96.67
27	1,494	8.33	8.4		98.19
28	1,616	7.72	7.2		98.98
29	1,939	5.65	4.4		101.06
30	2,135	7.90	5.6		101.90
31	3,299	5.00	2.3		105.09
32	4,344	4.37	1.5		106.43
33	5,101	4.12	1.2		107.40
34	6,614	3.34	0.8		109.35
35	10,380	75.00	10.9	Upper Marker	113.00
36	13,448	0.00	0.0		115.87

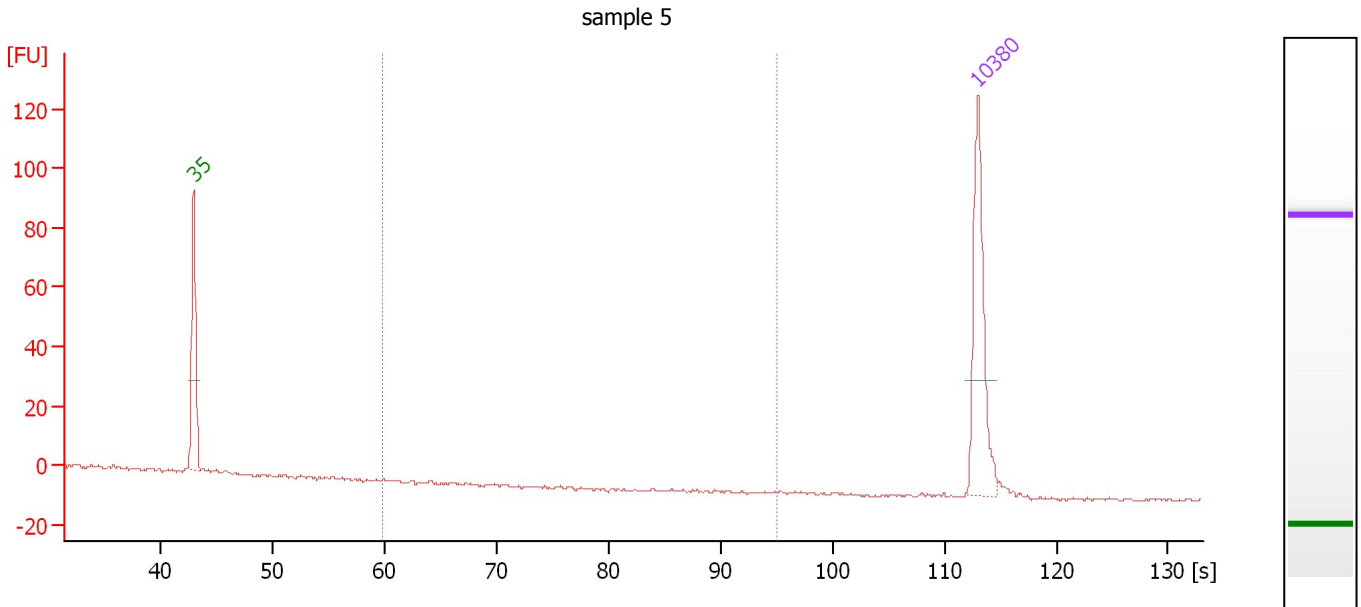
#### Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ $\mu$ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	541	500.80	527.3	1,761.6	69	37.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
 Modified: 4/20/2018 4:35:54 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 5**

Number of peaks found: 0                      Corr. Area 1: 0.0  
 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	10,380	75.00	10.9	Upper Marker	113.00

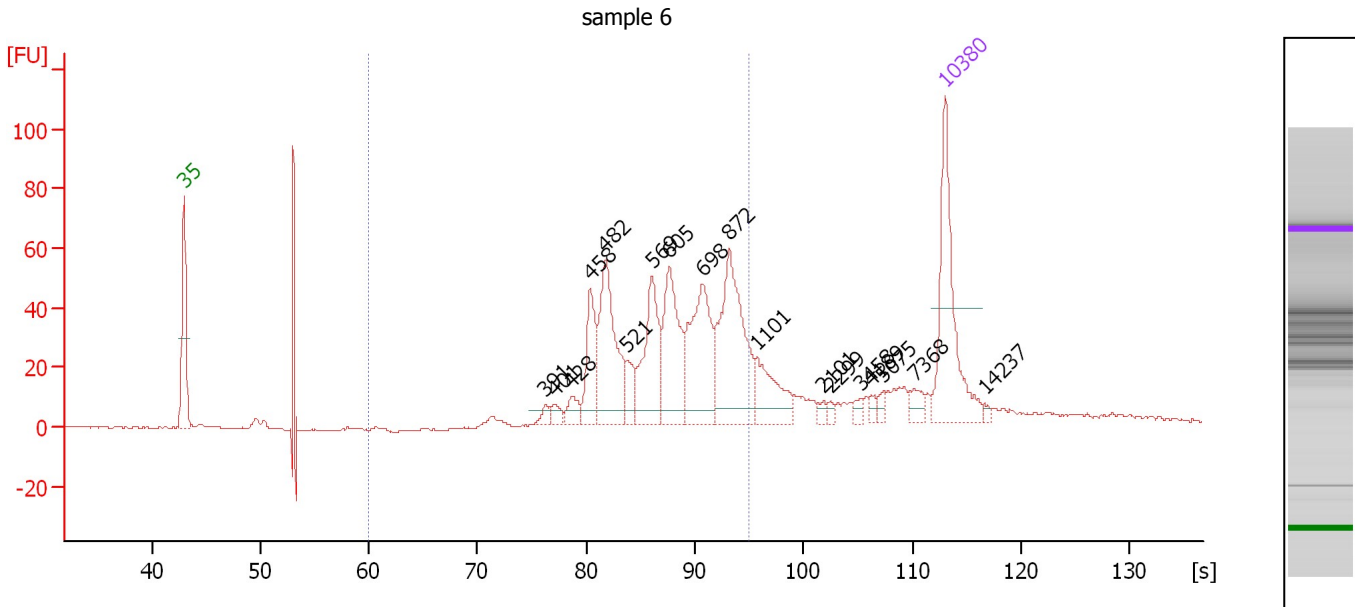
**Region table for sample 5 : sample 5**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of 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\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
 Modified: 4/20/2018 4:35:54 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 6**

Number of peaks found: 18      Corr. Area 1: 665.6  
 Noise: 0.4

**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	391	6.20	24.1		76.25
3	401	7.57	28.6		77.09
4	428	11.82	41.9		78.62
5	458	42.78	141.4		80.40
6	482	90.08	283.0		81.78
7	521	16.78	48.8		83.80
8	569	64.64	172.2		86.03
9	605	68.53	171.7		87.66
10	698	86.49	187.9		90.67
11	872	106.32	184.7		93.19
12	1,101	35.96	49.5		95.66
13	2,101	3.20	2.3		101.79
14	2,299	2.79	1.8		102.43
15	3,458	4.11	1.8		105.29
16	4,189	3.47	1.3		106.23
17	5,075	4.38	1.3		107.37
18	7,368	8.34	1.7		110.18
19	10,380	75.00	10.9	Upper Marker	113.00
20	14,237	0.00	0.0		116.61

**Region table for sample 6 : sample 6**

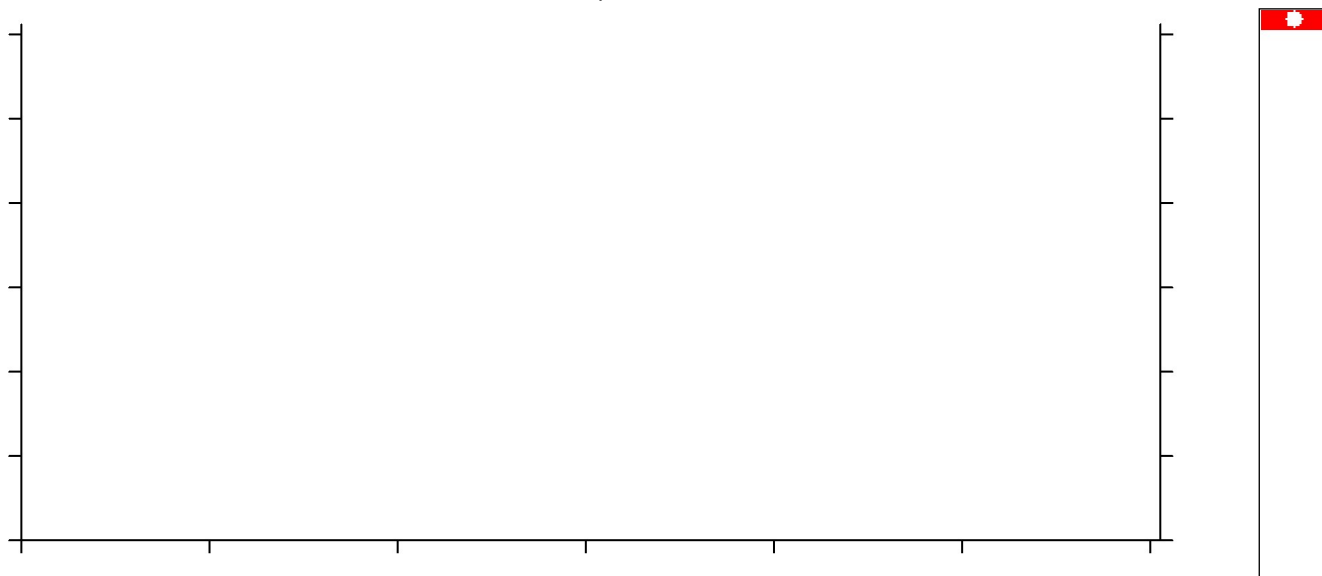
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	638	489.14	665.6	1,254.8	74	24.8

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
Modified: 4/20/2018 4:35:54 PM

**Electropherogram Summary Continued ...**

sample 7



**Setpoint Deviations for sample 7 : sample 7**

End Analysis Time Range [s] : 12.4

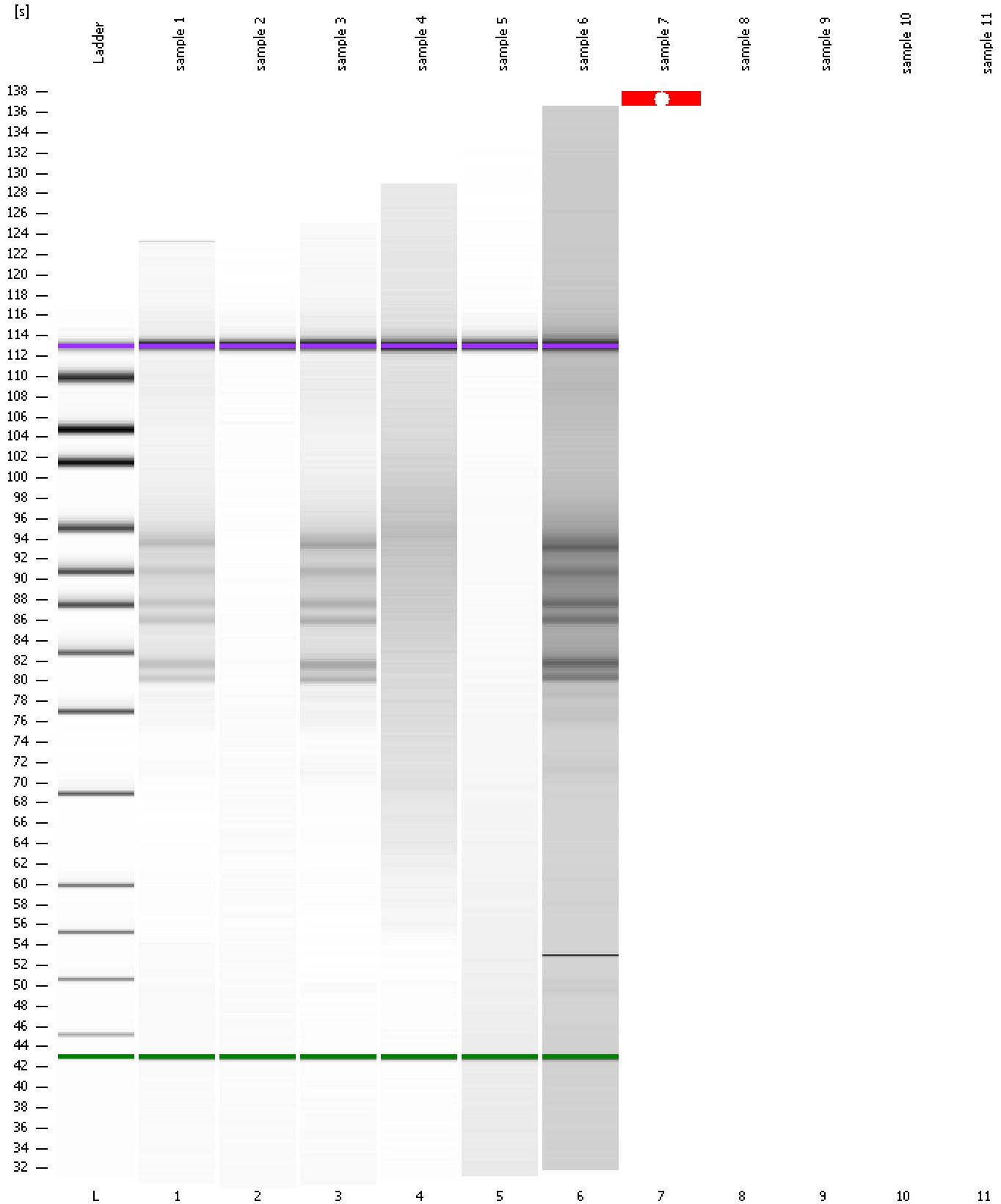
**Overall Results for sample 7 : sample 7**

Noise: 0.6

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
Modified: 4/20/2018 4:35:54 PM

**Gel Image**

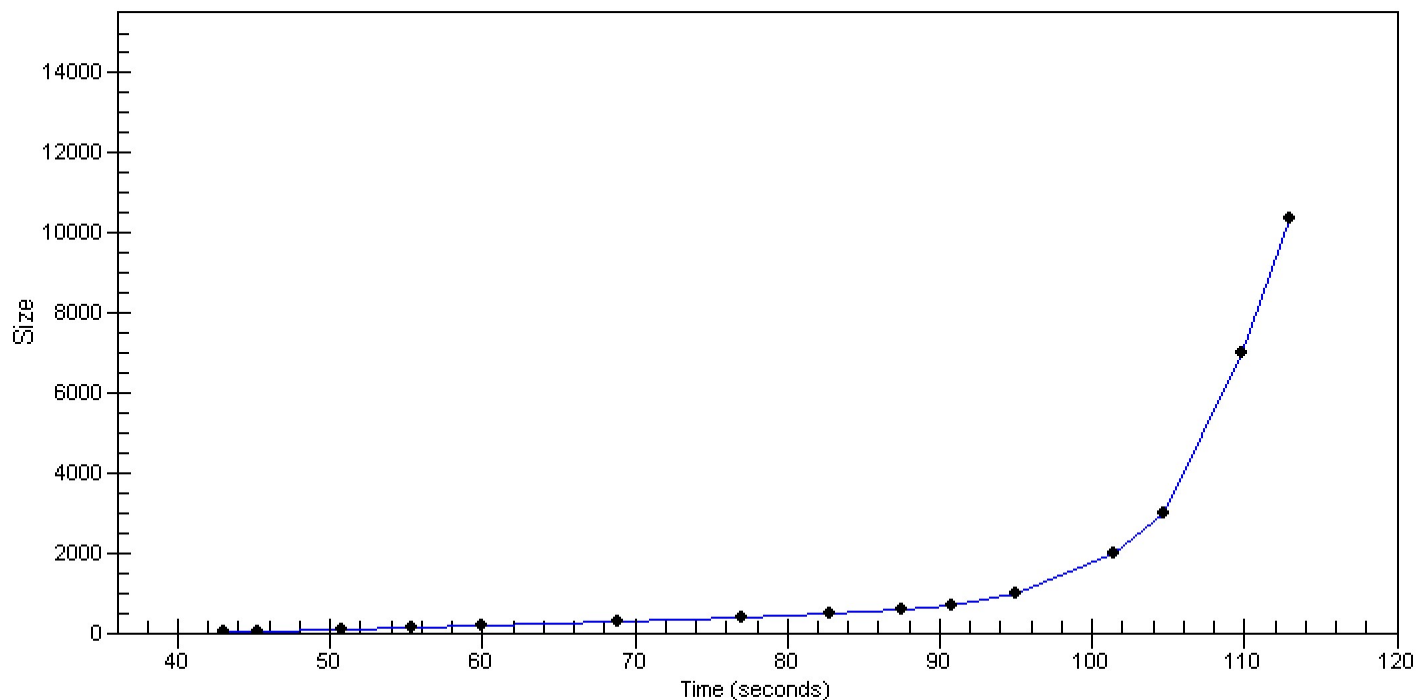


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
Modified: 4/20/2018 4:35:54 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-20\2018-04-20\_004.xad

Created: 4/20/2018 4:08:06 PM  
Modified: 4/20/2018 4:35:54 PM

**Invalid Samples**

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.