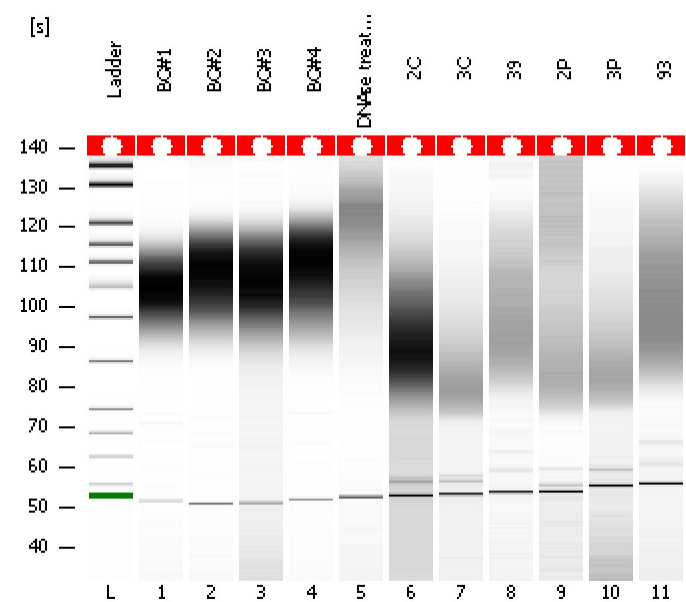


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
Modified: 4/5/2019 11:02:36 AM

**Electrophoresis File Run Summary**



Instrument Information:

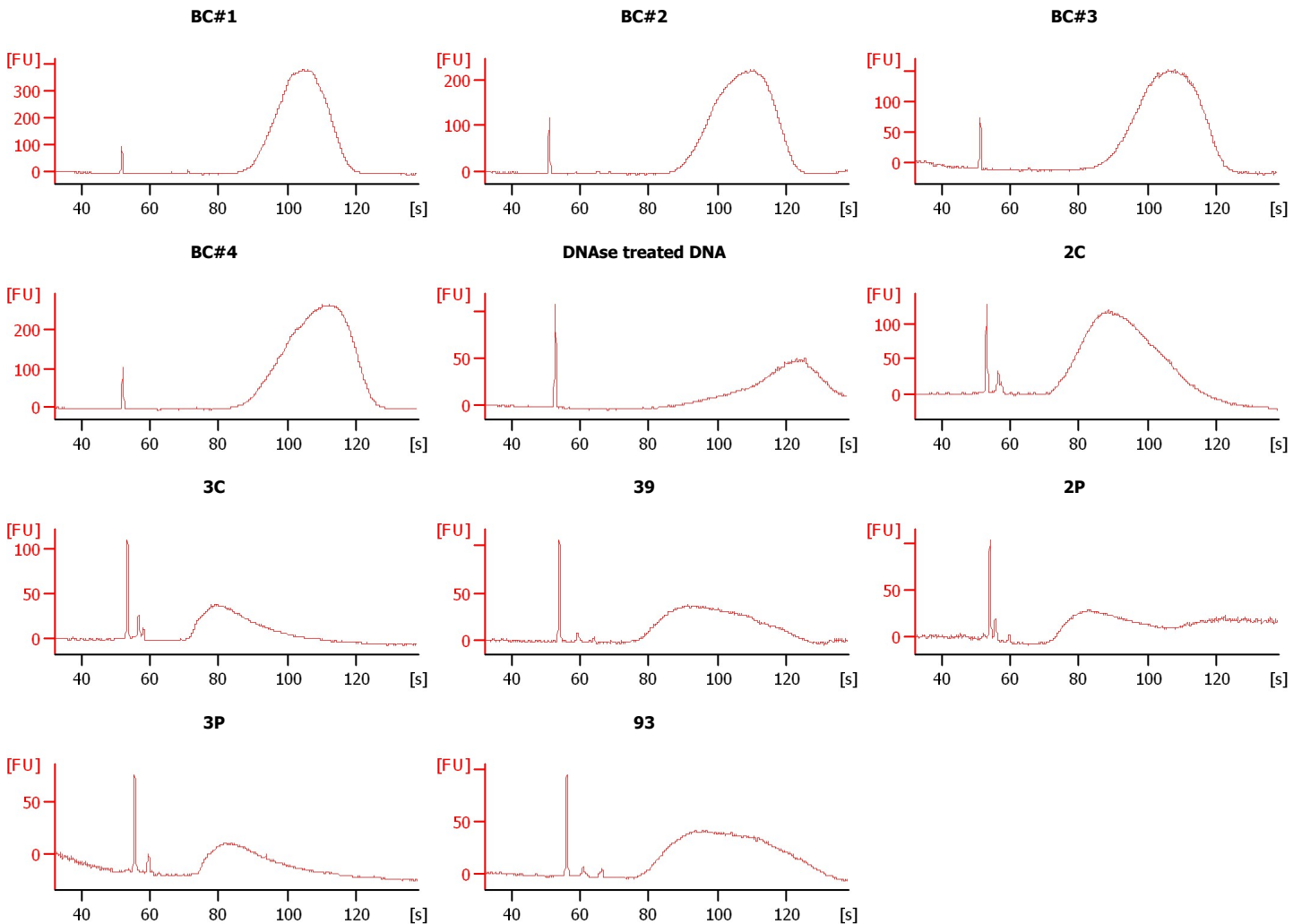
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
BC#1		<input type="checkbox"/>	✓			
BC#2		<input type="checkbox"/>	✓			
BC#3		<input type="checkbox"/>	✓			
BC#4		<input type="checkbox"/>	✓			
DNase treated DNA		<input type="checkbox"/>	✓			
2C		<input type="checkbox"/>	✓			
3C		<input type="checkbox"/>	✓			
39		<input type="checkbox"/>	✓			
2P		<input type="checkbox"/>	✓			
3P		<input type="checkbox"/>	✓			
93		<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\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
Modified: 4/5/2019 11:02:36 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

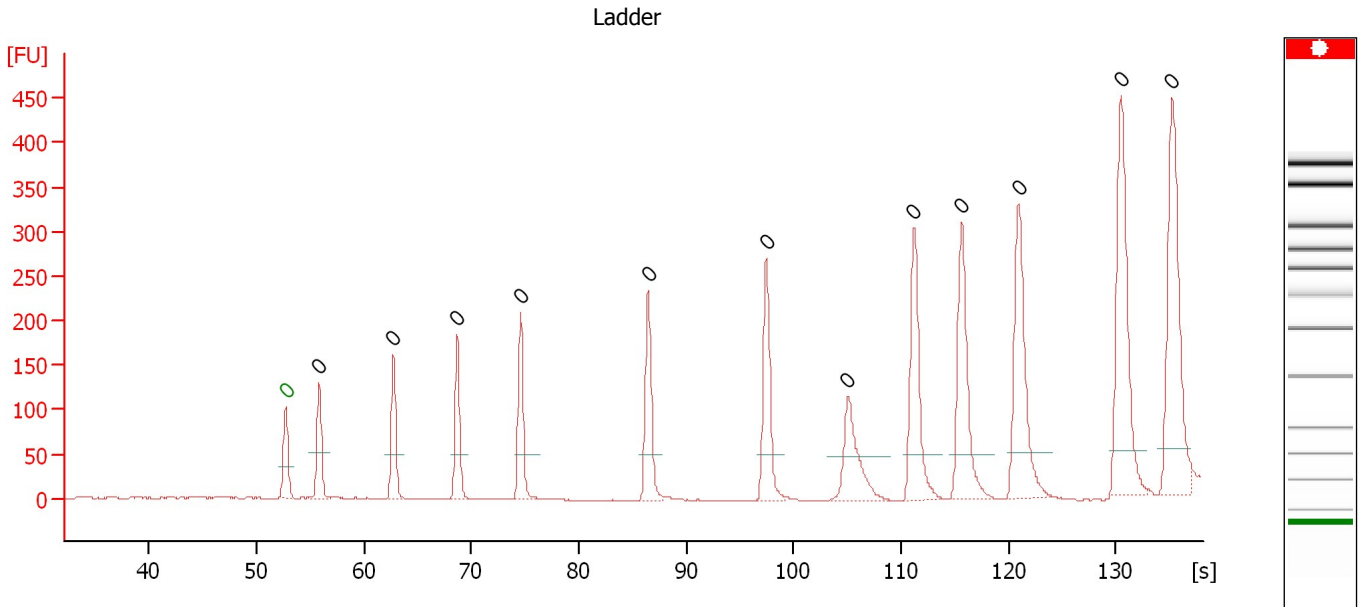
**Ladder**

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\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.5

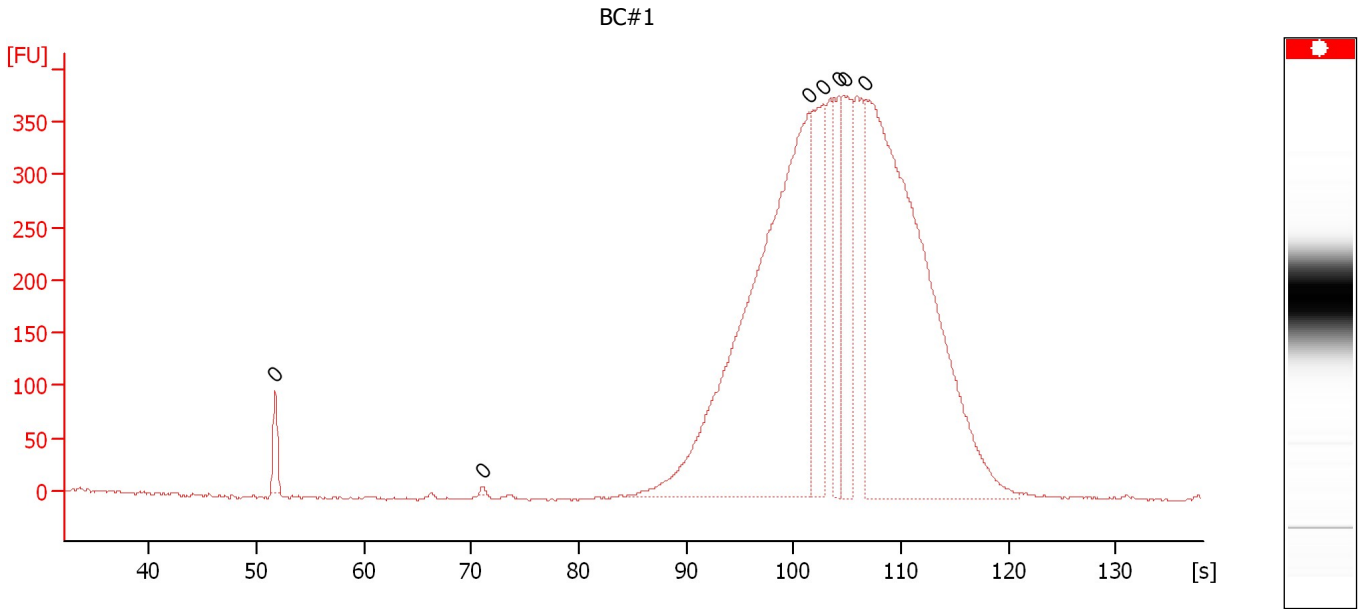
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	52.70
2	0	0.00	0.0	Ladder Peak	55.85
3	0	0.00	0.0	Ladder Peak	62.75
4	0	0.00	0.0	Ladder Peak	68.70
5	0	0.00	0.0	Ladder Peak	74.60
6	0	0.00	0.0	Ladder Peak	86.45
7	0	0.00	0.0	Ladder Peak	97.45
8	0	0.00	0.0	Ladder Peak	105.05
9	0	0.00	0.0	Ladder Peak	111.20
10	0	0.00	0.0	Ladder Peak	115.65
11	0	0.00	0.0	Ladder Peak	120.95
12	0	0.00	0.0	Ladder Peak	130.50
13	0	0.00	0.0	Ladder Peak	135.25

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : BC#1**

Number of peaks found: 0                      Noise: 0.9

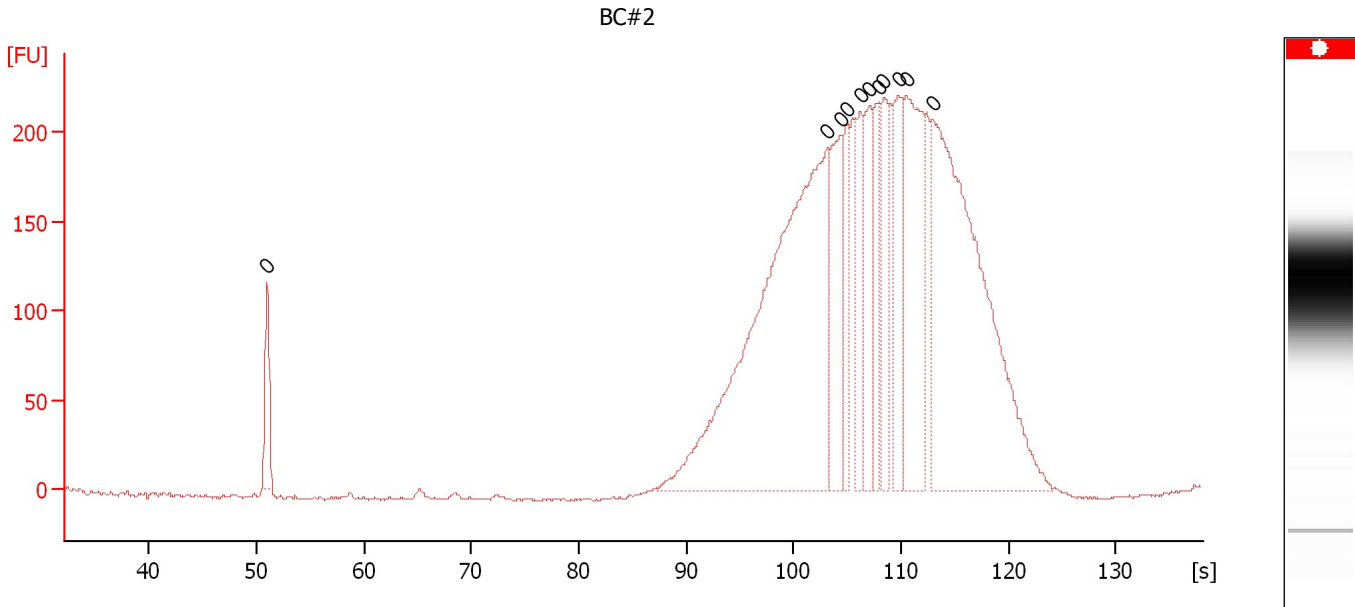
**Peak table for sample 1 : BC#1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		51.75
2	0	0.00	0.0		71.05
3	0	0.00	0.0		101.45
4	0	0.00	0.0		102.80
5	0	0.00	0.0		104.20
6	0	0.00	0.0		104.70
7	0	0.00	0.0		106.70

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : BC#2**

Number of peaks found: 0                      Noise: 0.8

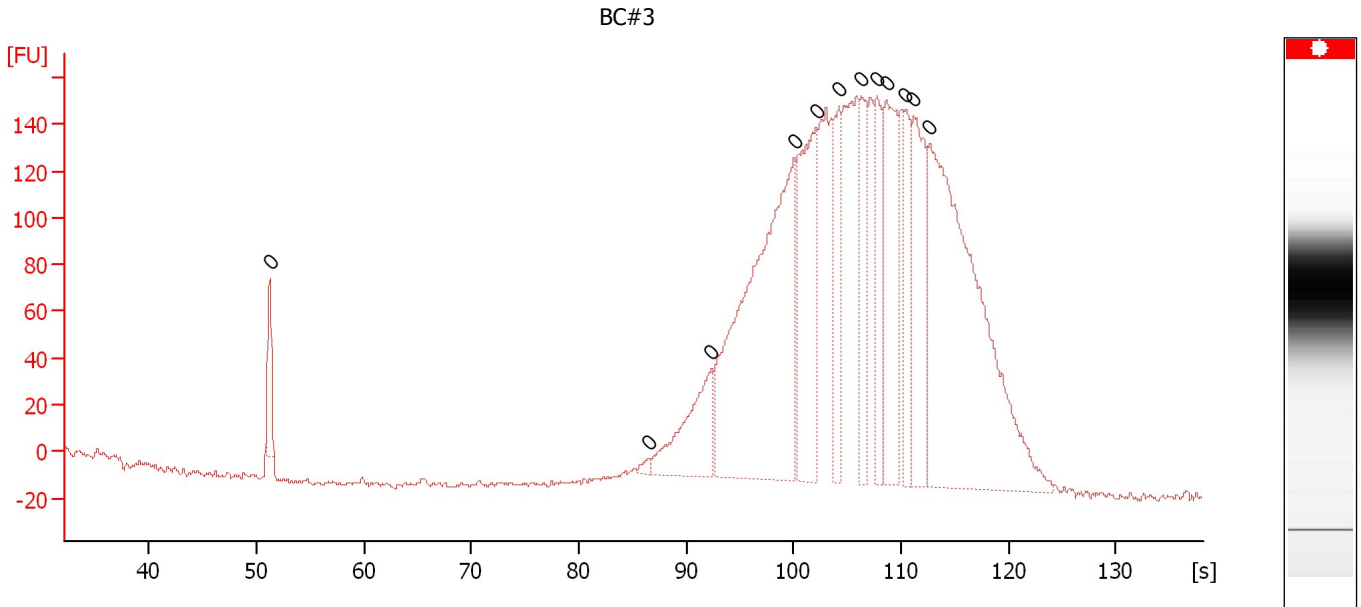
**Peak table for sample 2 : BC#2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		51.00
2	0	0.00	0.0		103.15
3	0	0.00	0.0		104.40
4	0	0.00	0.0		105.00
5	0	0.00	0.0		106.20
6	0	0.00	0.0		107.10
7	0	0.00	0.0		107.90
8	0	0.00	0.0		108.40
9	0	0.00	0.0		109.75
10	0	0.00	0.0		110.50
11	0	0.00	0.0		112.95

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : BC#3**

Number of peaks found: 0                      Noise: 1.1

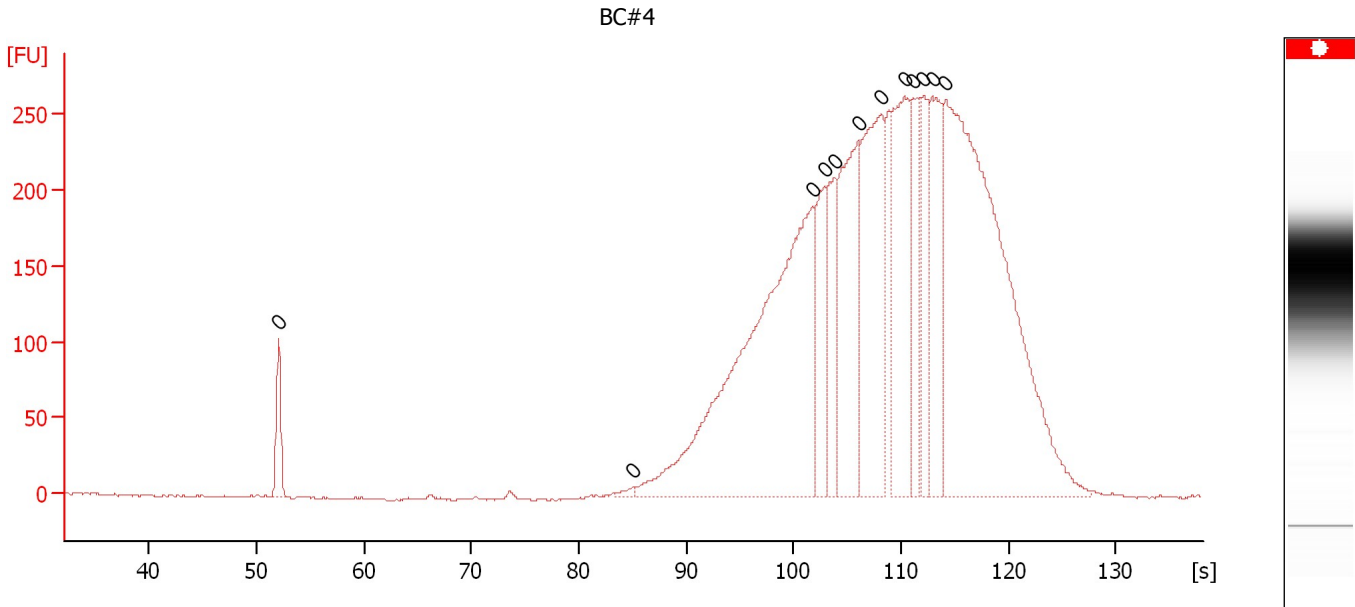
**Peak table for sample 3 : BC#3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		51.20
2	0	0.00	0.0		86.60
3	0	0.00	0.0		92.35
4	0	0.00	0.0		100.05
5	0	0.00	0.0		102.10
6	0	0.00	0.0		104.20
7	0	0.00	0.0		106.30
8	0	0.00	0.0		107.75
9	0	0.00	0.0		108.65
10	0	0.00	0.0		110.30
11	0	0.00	0.0		111.20
12	0	0.00	0.0		112.65

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : BC#4**

Number of peaks found: 0                      Noise: 0.6

**Peak table for sample 4 : BC#4**

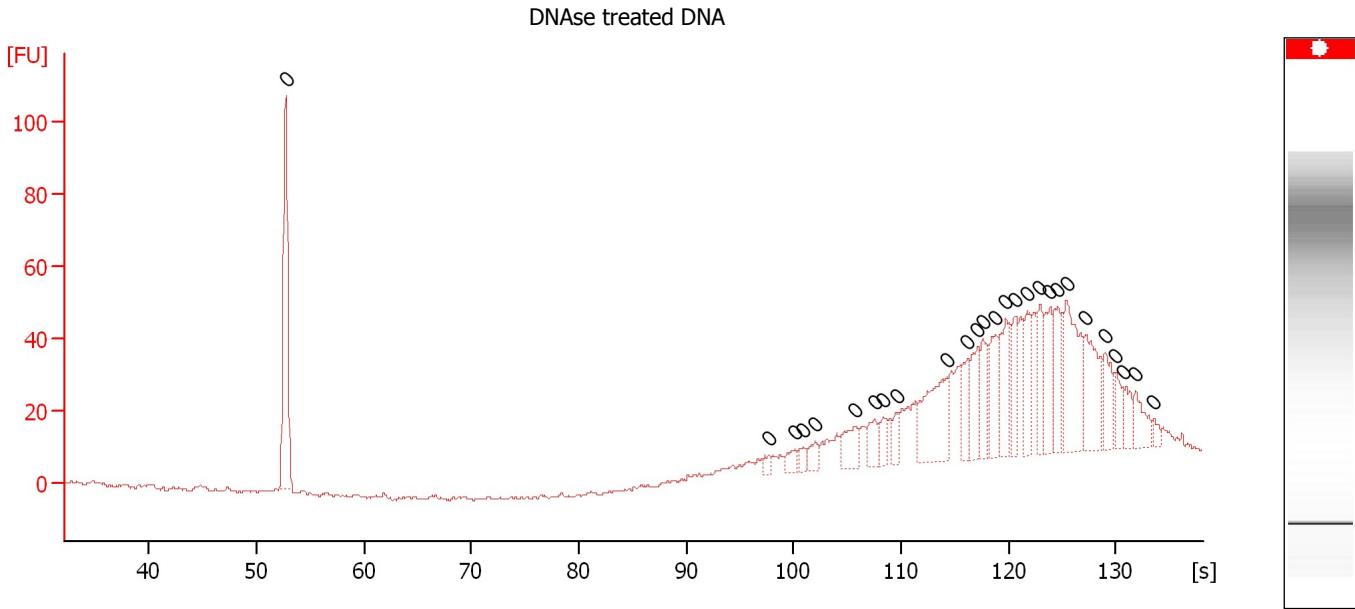
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		52.05
2	0	0.00	0.0		85.00
3	0	0.00	0.0		101.75
4	0	0.00	0.0		102.90
5	0	0.00	0.0		103.80
6	0	0.00	0.0		106.00
7	0	0.00	0.0		108.15
8	0	0.00	0.0		110.30
9	0	0.00	0.0		111.15
10	0	0.00	0.0		112.10
11	0	0.00	0.0		112.90
12	0	0.00	0.0		114.15



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : DNase treated DNA**

Number of peaks found: 0                      Noise: 0.5

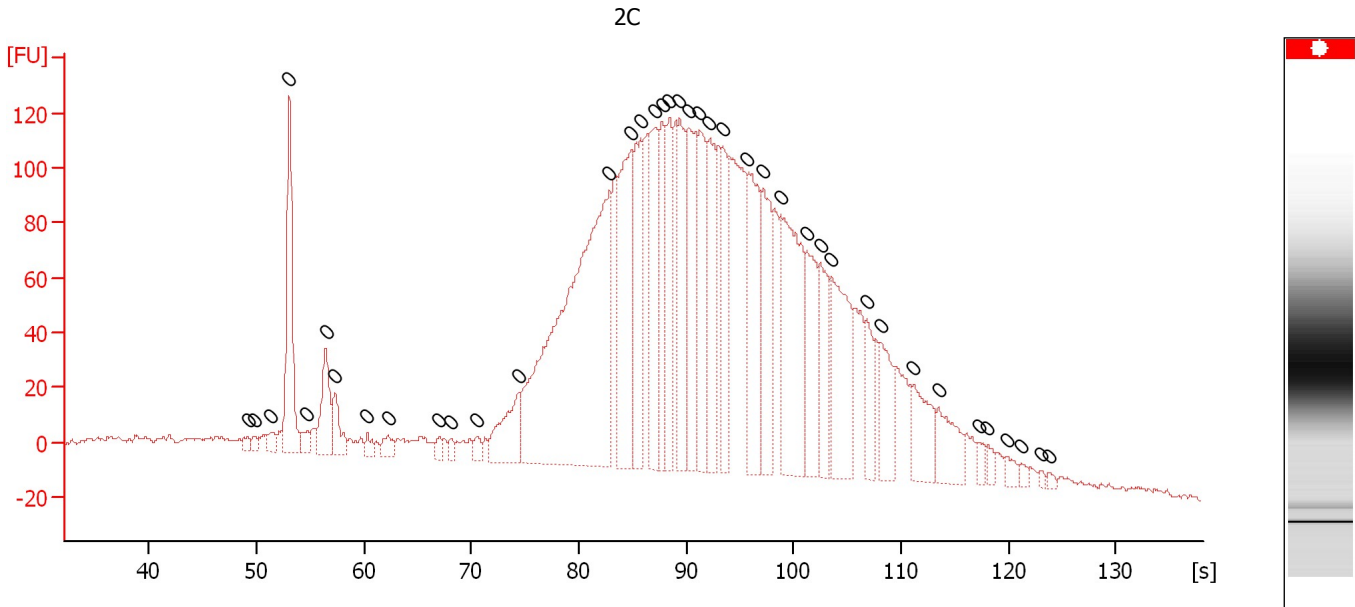
**Peak table for sample 5 : DNase treated DNA**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		52.70
2	0	0.00	0.0		97.70
3	0	0.00	0.0		100.10
4	0	0.00	0.0		100.85
5	0	0.00	0.0		102.00
6	0	0.00	0.0		105.65
7	0	0.00	0.0		107.50
8	0	0.00	0.0		108.40
9	0	0.00	0.0		109.55
10	0	0.00	0.0		114.25
11	0	0.00	0.0		116.20
12	0	0.00	0.0		117.15
13	0	0.00	0.0		117.60
14	0	0.00	0.0		118.75
15	0	0.00	0.0		119.70
16	0	0.00	0.0		120.65
17	0	0.00	0.0		121.70
18	0	0.00	0.0		122.95
19	0	0.00	0.0		123.85
20	0	0.00	0.0		124.60
21	0	0.00	0.0		125.40
22	0	0.00	0.0		127.15
23	0	0.00	0.0		129.00
24	0	0.00	0.0		129.95
25	0	0.00	0.0		130.75
26	0	0.00	0.0		131.80
27	0	0.00	0.0		133.50

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 2C**

Number of peaks found: 0                      Noise: 0.9

**Peak table for sample 6 : 2C**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.20
2	0	0.00	0.0		49.80
3	0	0.00	0.0		51.30
4	0	0.00	0.0		53.05
5	0	0.00	0.0		54.70
6	0	0.00	0.0		56.45
7	0	0.00	0.0		57.30
8	0	0.00	0.0		60.30
9	0	0.00	0.0		62.25
10	0	0.00	0.0		67.00
11	0	0.00	0.0		68.00
12	0	0.00	0.0		70.55
13	0	0.00	0.0		74.40
14	0	0.00	0.0		82.85
15	0	0.00	0.0		84.90
16	0	0.00	0.0		85.75
17	0	0.00	0.0		87.10
18	0	0.00	0.0		87.75
19	0	0.00	0.0		88.45
20	0	0.00	0.0		89.40
21	0	0.00	0.0		90.25
22	0	0.00	0.0		91.25
23	0	0.00	0.0		92.15
24	0	0.00	0.0		93.40
25	0	0.00	0.0		95.65
26	0	0.00	0.0		97.15
27	0	0.00	0.0		98.80

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
Modified: 4/5/2019 11:02:36 AM

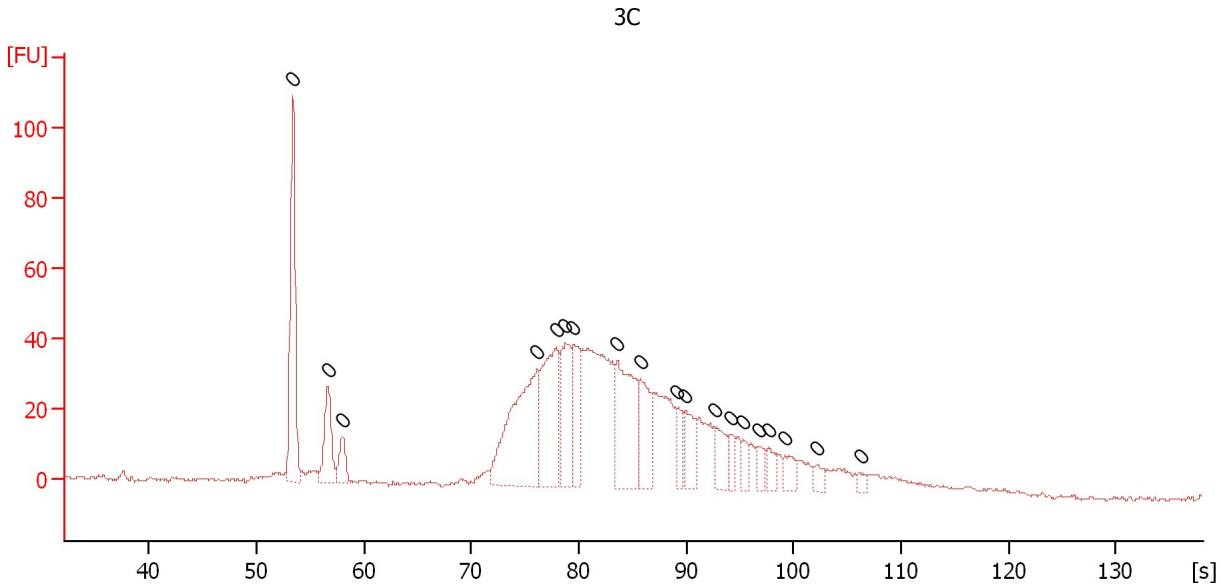
**Electropherogram Summary Continued ...****... Peak table for sample 6 :      2C**

<b>Peak</b>	<b>Size [bp]</b>	<b>Conc. [pg/μl]</b>	<b>Molarity [pmol/l]</b>	<b>Observations</b>	<b>Aligned Migration Time [s]</b>
28	0	0.00	0.0		101.25
29	0	0.00	0.0		102.50
30	0	0.00	0.0		103.55
31	0	0.00	0.0		106.80
32	0	0.00	0.0		108.15
33	0	0.00	0.0		111.15
34	0	0.00	0.0		113.45
35	0	0.00	0.0		117.30
36	0	0.00	0.0		118.10
37	0	0.00	0.0		119.80
38	0	0.00	0.0		121.25
39	0	0.00	0.0		123.10
40	0	0.00	0.0		123.80

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 3C**

Number of peaks found: 0                      Noise: 0.6

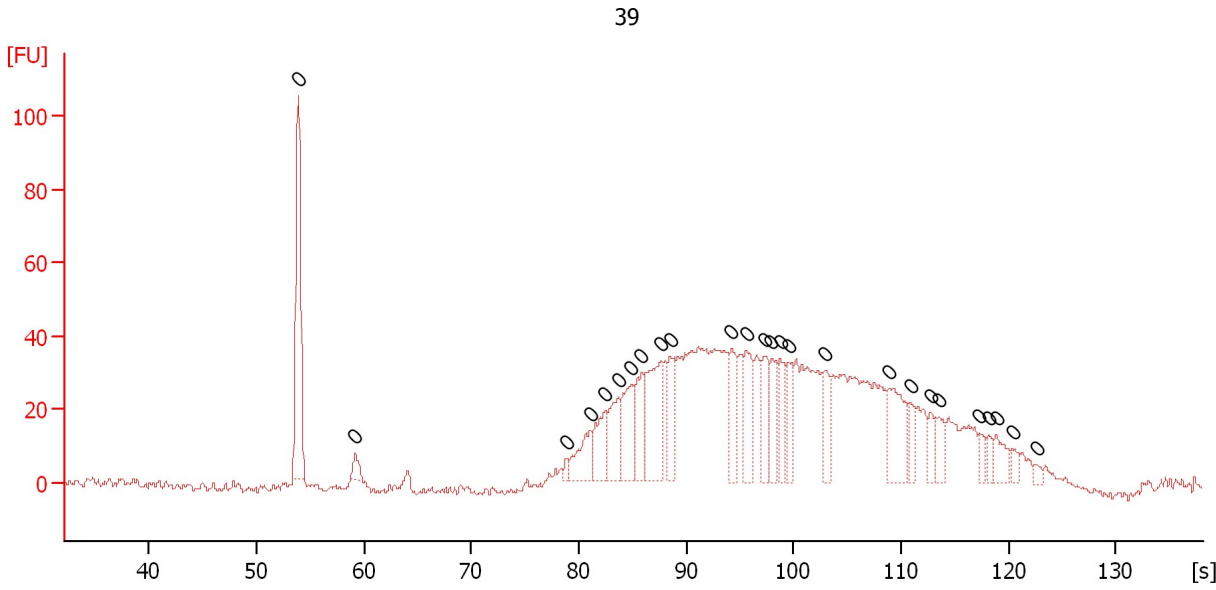
**Peak table for sample 7 : 3C**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		53.40
2	0	0.00	0.0		56.65
3	0	0.00	0.0		58.00
4	0	0.00	0.0		76.10
5	0	0.00	0.0		77.90
6	0	0.00	0.0		78.75
7	0	0.00	0.0		79.50
8	0	0.00	0.0		83.60
9	0	0.00	0.0		85.75
10	0	0.00	0.0		89.15
11	0	0.00	0.0		89.85
12	0	0.00	0.0		92.65
13	0	0.00	0.0		94.20
14	0	0.00	0.0		95.30
15	0	0.00	0.0		96.80
16	0	0.00	0.0		97.70
17	0	0.00	0.0		99.15
18	0	0.00	0.0		102.15
19	0	0.00	0.0		106.20

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 39**

Number of peaks found: 0                      Noise: 0.8

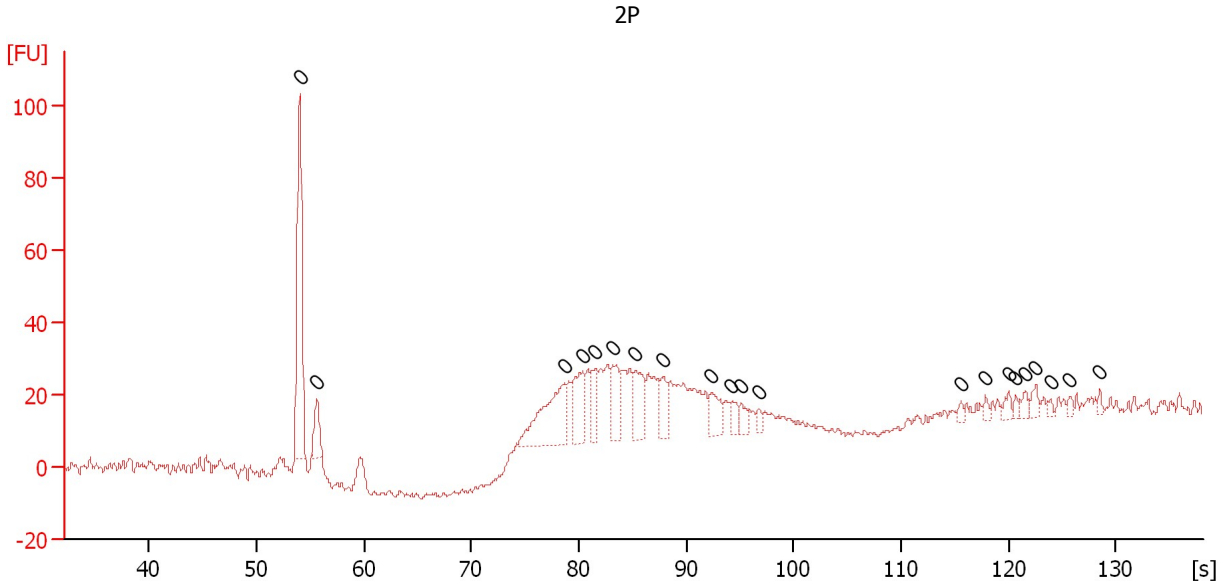
**Peak table for sample 8 : 39**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		53.90
2	0	0.00	0.0		59.20
3	0	0.00	0.0		78.90
4	0	0.00	0.0		81.05
5	0	0.00	0.0		82.45
6	0	0.00	0.0		83.70
7	0	0.00	0.0		84.85
8	0	0.00	0.0		85.85
9	0	0.00	0.0		87.65
10	0	0.00	0.0		88.50
11	0	0.00	0.0		94.20
12	0	0.00	0.0		95.60
13	0	0.00	0.0		97.35
14	0	0.00	0.0		97.95
15	0	0.00	0.0		98.75
16	0	0.00	0.0		99.60
17	0	0.00	0.0		102.95
18	0	0.00	0.0		108.85
19	0	0.00	0.0		110.85
20	0	0.00	0.0		112.80
21	0	0.00	0.0		113.45
22	0	0.00	0.0		117.30
23	0	0.00	0.0		118.20
24	0	0.00	0.0		118.90
25	0	0.00	0.0		120.40
26	0	0.00	0.0		122.60

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 2P**

Number of peaks found: 0                      Noise: 1.0

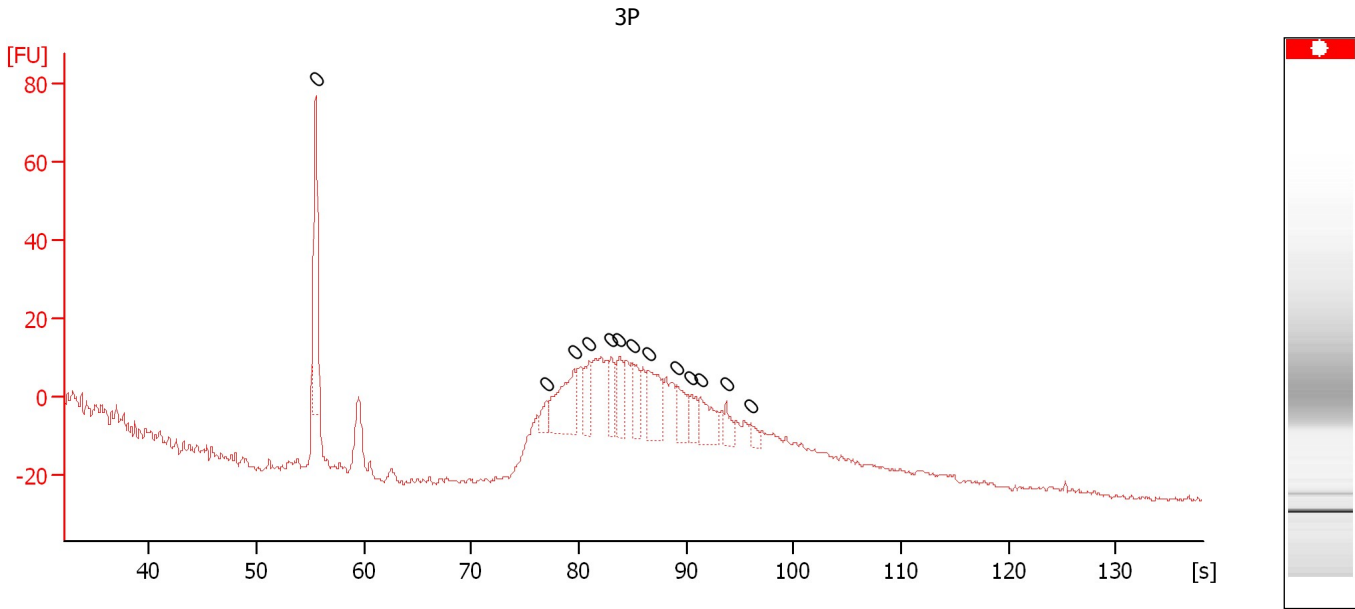
**Peak table for sample 9 : 2P**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		54.00
2	0	0.00	0.0		55.60
3	0	0.00	0.0		78.65
4	0	0.00	0.0		80.40
5	0	0.00	0.0		81.55
6	0	0.00	0.0		83.15
7	0	0.00	0.0		85.30
8	0	0.00	0.0		87.90
9	0	0.00	0.0		92.35
10	0	0.00	0.0		94.20
11	0	0.00	0.0		95.10
12	0	0.00	0.0		96.75
13	0	0.00	0.0		115.55
14	0	0.00	0.0		117.85
15	0	0.00	0.0		120.05
16	0	0.00	0.0		120.70
17	0	0.00	0.0		121.55
18	0	0.00	0.0		122.55
19	0	0.00	0.0		123.90
20	0	0.00	0.0		125.65
21	0	0.00	0.0		128.50

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 3P**

Number of peaks found: 0                      Noise: 0.6

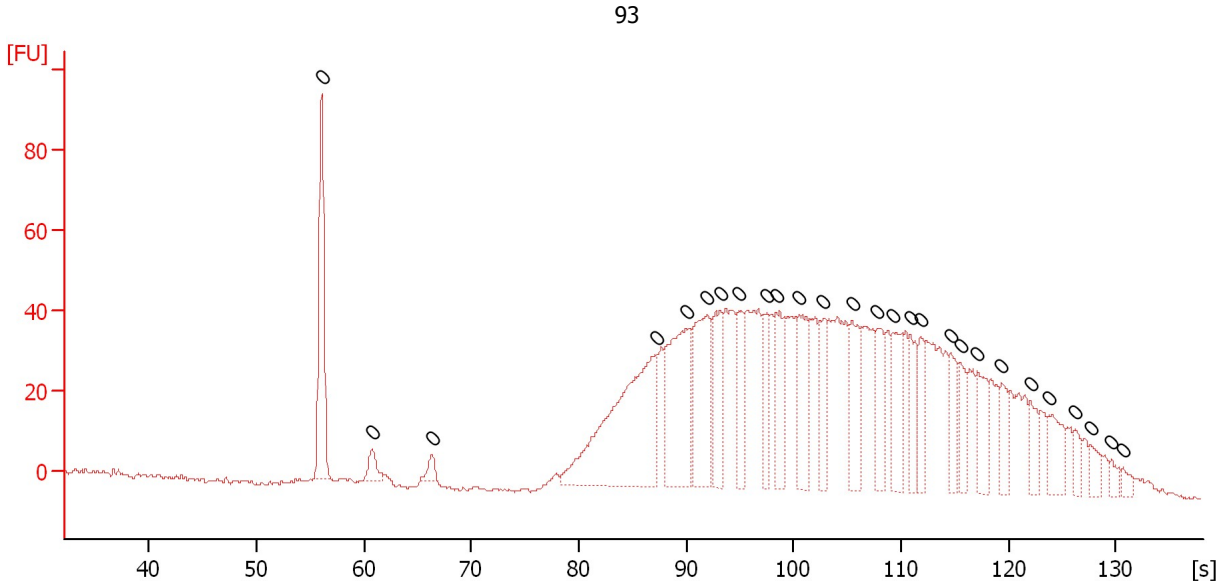
**Peak table for sample 10 : 3P**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		55.50
2	0	0.00	0.0		77.05
3	0	0.00	0.0		79.55
4	0	0.00	0.0		81.00
5	0	0.00	0.0		83.00
6	0	0.00	0.0		83.80
7	0	0.00	0.0		85.00
8	0	0.00	0.0		86.55
9	0	0.00	0.0		89.10
10	0	0.00	0.0		90.40
11	0	0.00	0.0		91.35
12	0	0.00	0.0		93.70
13	0	0.00	0.0		96.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 AM

**Electropherogram Summary Continued ...**



93

**Overall Results for sample 11 : 93**

Number of peaks found: 0                      Noise: 0.6

**Peak table for sample 11 : 93**

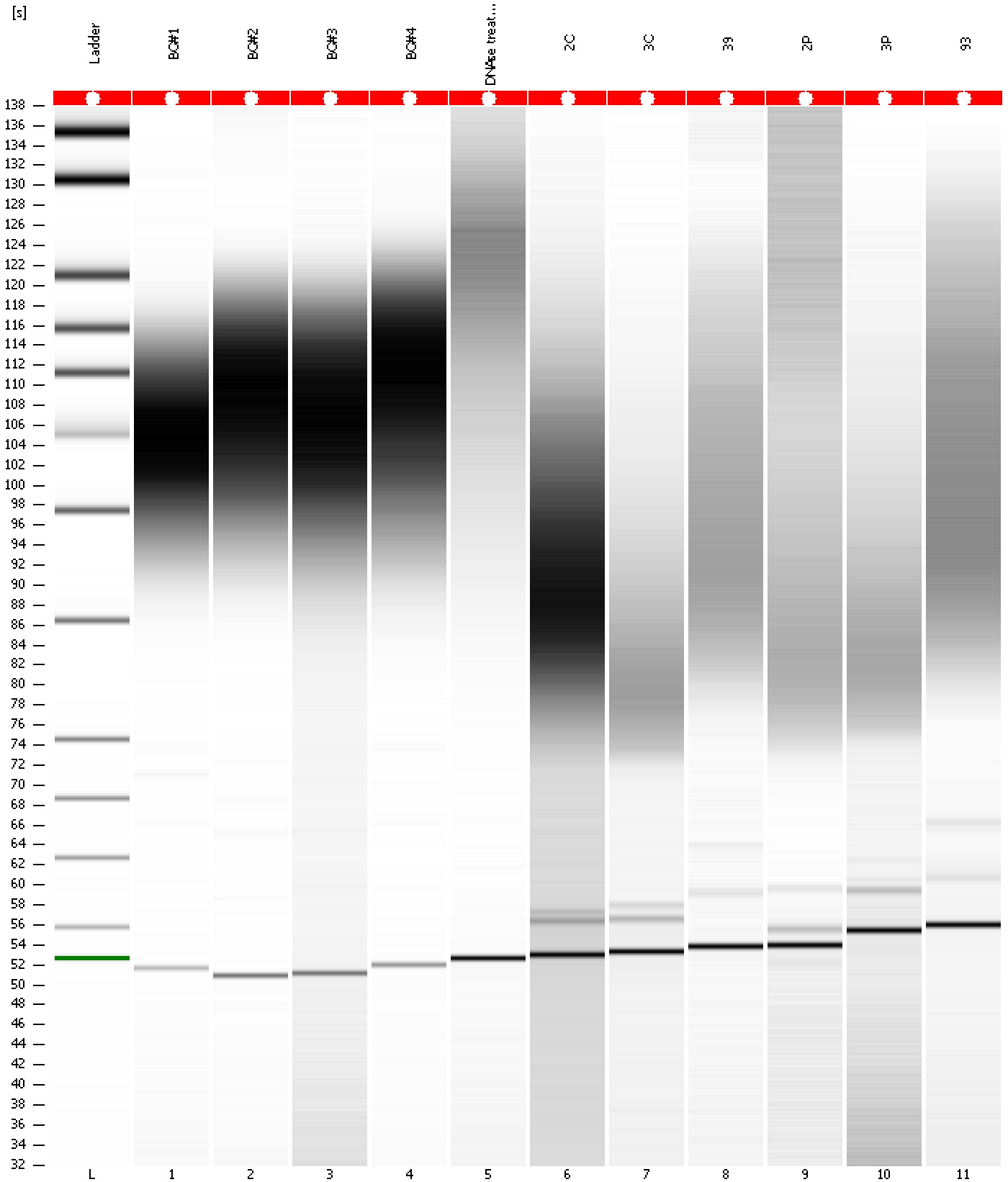
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		56.05
2	0	0.00	0.0		60.80
3	0	0.00	0.0		66.30
4	0	0.00	0.0		87.25
5	0	0.00	0.0		90.00
6	0	0.00	0.0		92.00
7	0	0.00	0.0		93.15
8	0	0.00	0.0		94.90
9	0	0.00	0.0		97.55
10	0	0.00	0.0		98.40
11	0	0.00	0.0		100.50
12	0	0.00	0.0		102.70
13	0	0.00	0.0		105.45
14	0	0.00	0.0		107.75
15	0	0.00	0.0		109.20
16	0	0.00	0.0		110.85
17	0	0.00	0.0		111.80
18	0	0.00	0.0		114.65
19	0	0.00	0.0		115.55
20	0	0.00	0.0		117.10
21	0	0.00	0.0		119.35
22	0	0.00	0.0		122.05
23	0	0.00	0.0		123.75
24	0	0.00	0.0		126.20
25	0	0.00	0.0		127.65
26	0	0.00	0.0		129.55
27	0	0.00	0.0		130.65



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
Modified: 4/5/2019 11:02:36 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-05\2019-04-05\_001.xad

Created: 4/5/2019 10:21:18 AM  
 Modified: 4/5/2019 11:02:36 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		4/5/2019 11:02:35 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\2019-04-05\2019-04-05_001.xad)		Instrument	Run		4/5/2019 10:21:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		4/5/2019 10:21:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/5/2019 10:21:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/5/2019 10:21:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		4/5/2019 10:21:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/5/2019 10:21:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/5/2019 10:21:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1