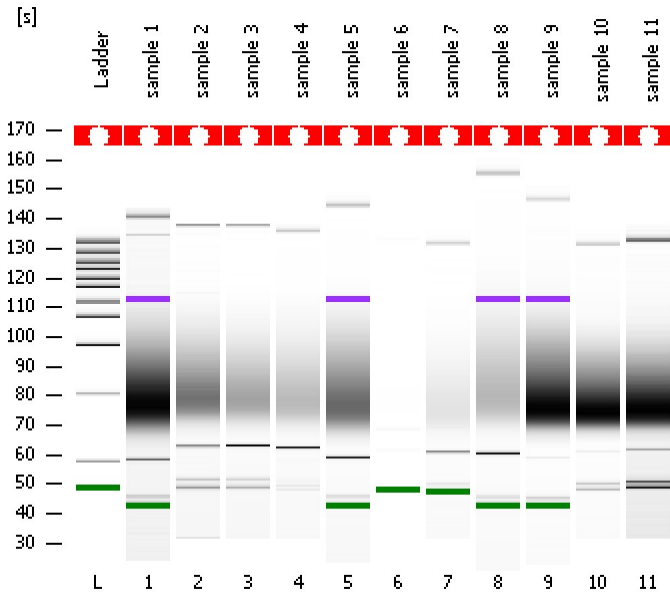


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
Modified: 1/4/2016 2:12:24 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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

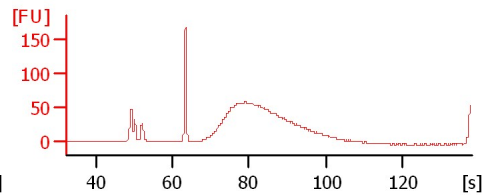
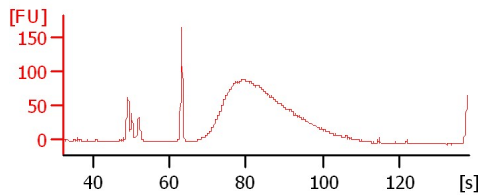
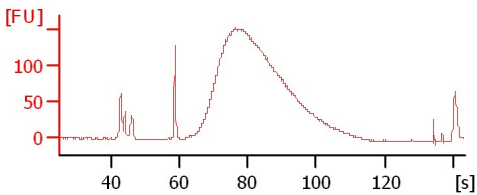
Chip Information:

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

sample 1

sample 2

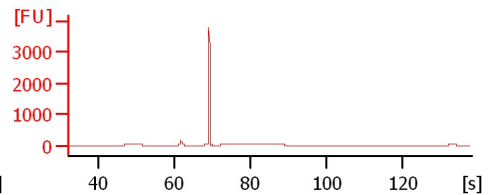
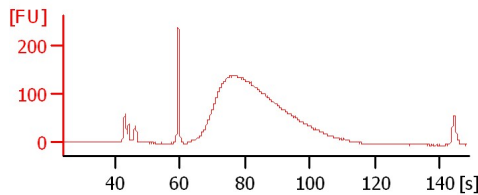
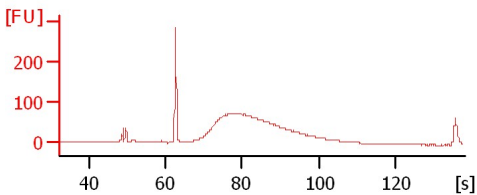
sample 3



sample 4

sample 5

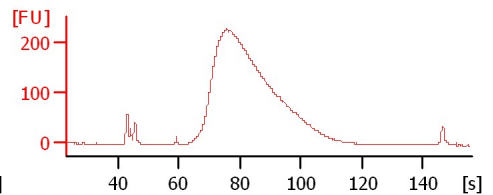
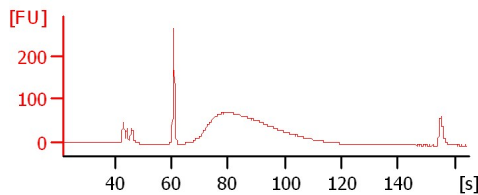
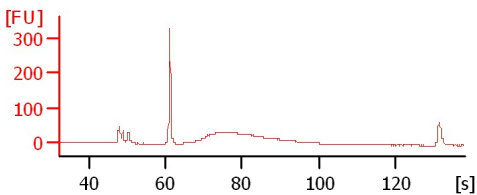
sample 6



sample 7

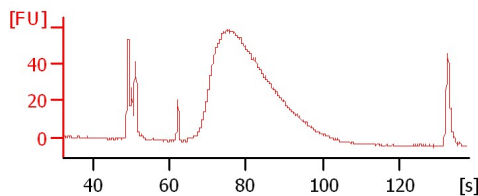
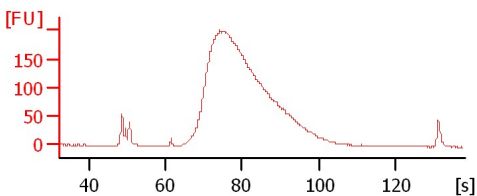
sample 8

sample 9



sample 10

sample 11



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
Modified: 1/4/2016 2:12:24 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:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
Modified: 1/4/2016 2:12:24 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

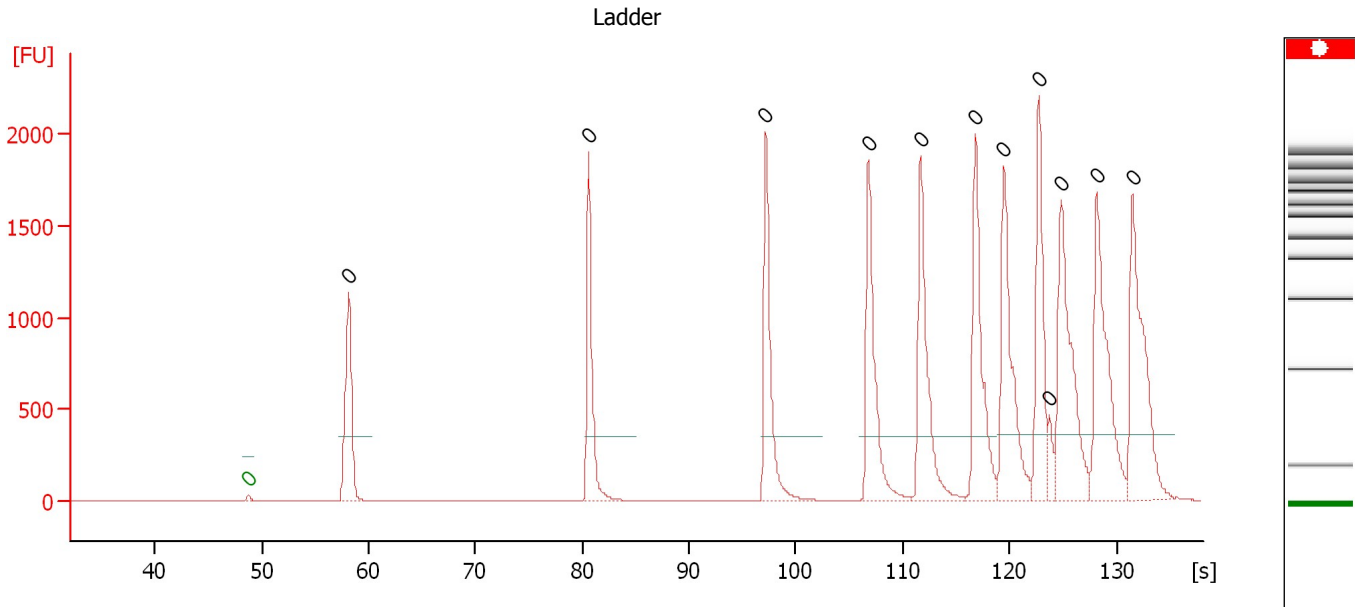
Ladder

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:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

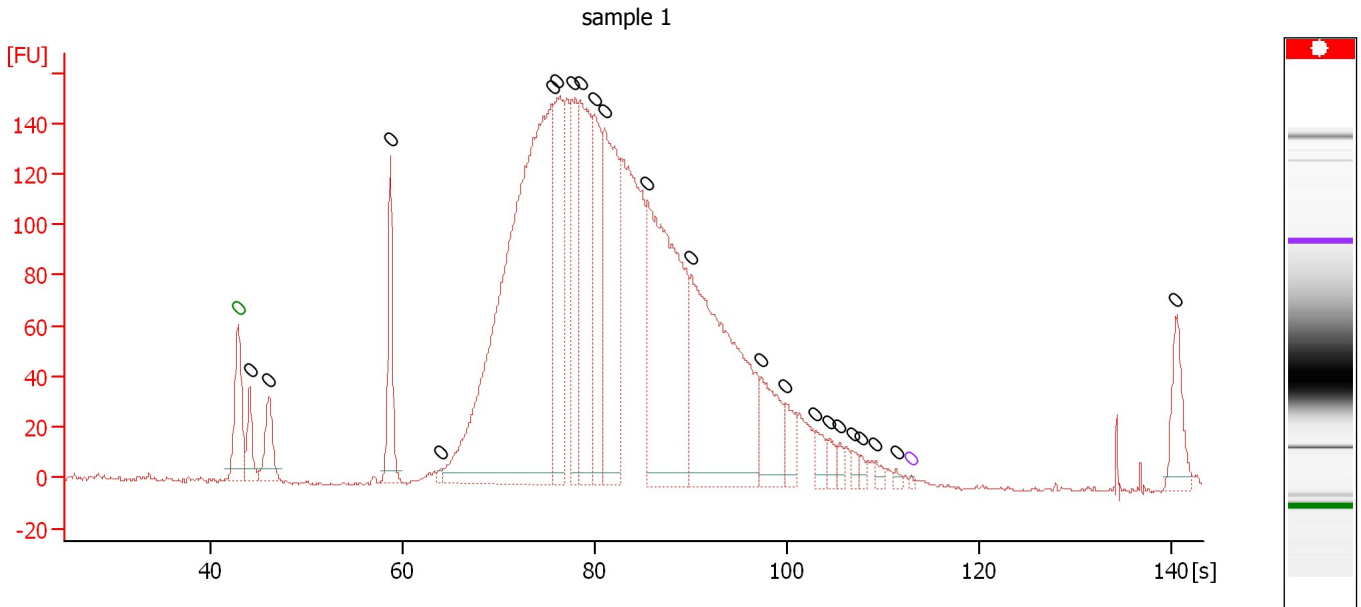
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	48.80
2	0	0.00	0.0	Ladder Peak	58.15
3	0	0.00	0.0	Ladder Peak	80.60
4	0	0.00	0.0	Ladder Peak	97.20
5	0	0.00	0.0	Ladder Peak	106.80
6	0	0.00	0.0	Ladder Peak	111.65
7	0	0.00	0.0	Ladder Peak	116.80
8	0	0.00	0.0	Ladder Peak	119.50
9	0	0.00	0.0	Ladder Peak	122.75
10	0	0.00	0.0	Ladder Peak	123.75
11	0	0.00	0.0	Ladder Peak	124.80
12	0	0.00	0.0	Ladder Peak	128.15
13	0	0.00	0.0	Ladder Peak	131.50

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 22 Noise: 0.7

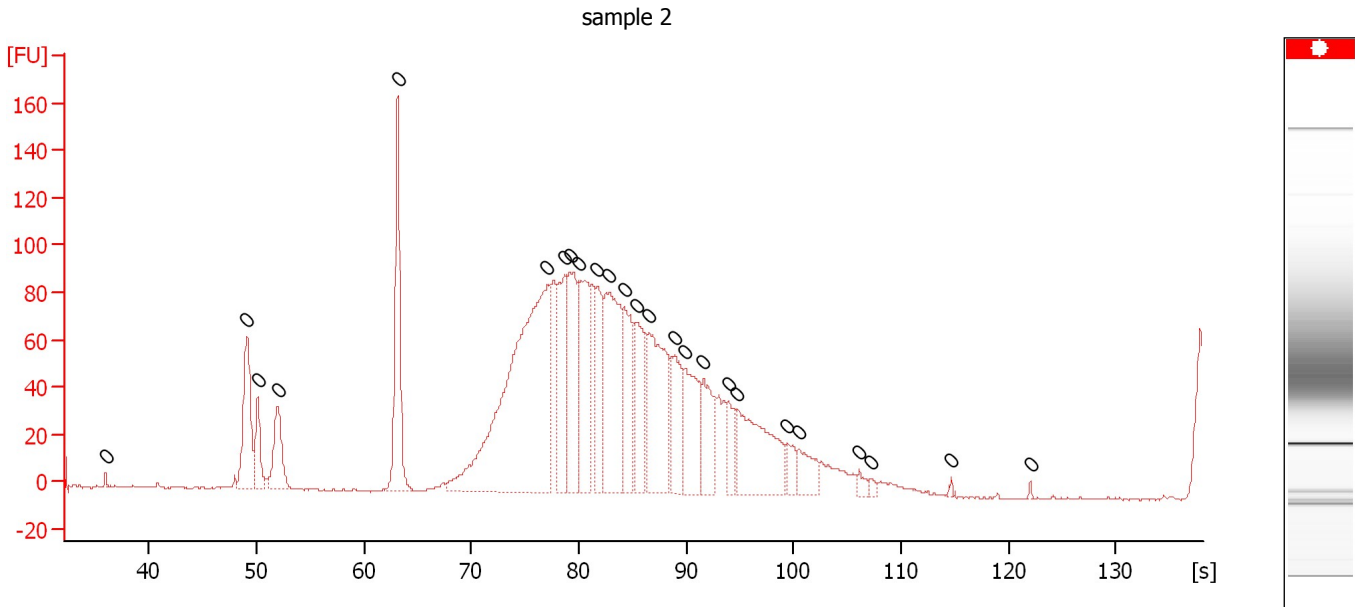
Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	43.00
2	0	0.00	0.0		44.17
3	0	0.00	0.0		46.18
4	0	0.00	0.0		58.81
5	0	0.00	0.0		64.12
6	0	0.00	0.0		75.63
7	0	0.00	0.0		76.07
8	0	0.00	0.0		77.75
9	0	0.00	0.0		78.53
10	0	0.00	0.0		79.98
11	0	0.00	0.0		81.10
12	0	0.00	0.0		85.57
13	0	0.00	0.0		90.09
14	0	0.00	0.0		97.41
15	0	0.00	0.0		99.93
16	0	0.00	0.0		103.00
17	0	0.00	0.0		104.40
18	0	0.00	0.0		105.57
19	0	0.00	0.0		106.85
20	0	0.00	0.0		107.75
21	0	0.00	0.0		109.31
22	0	0.00	0.0		111.44
23	0	0.00	0.0	Upper Marker	113.00
24	0	0.00	0.0		140.54

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 0 Noise: 0.4

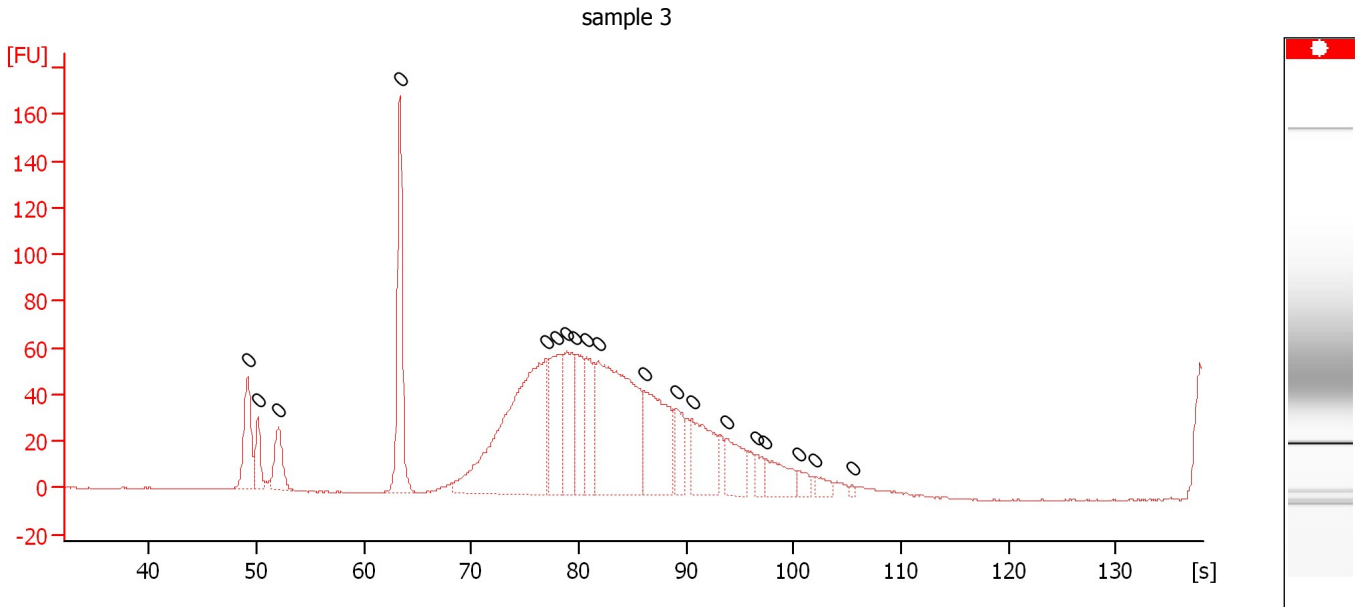
Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		35.95
2	0	0.00	0.0		49.10
3	0	0.00	0.0		50.10
4	0	0.00	0.0		51.95
5	0	0.00	0.0		63.15
6	0	0.00	0.0		77.10
7	0	0.00	0.0		78.70
8	0	0.00	0.0		79.20
9	0	0.00	0.0		80.00
10	0	0.00	0.0		81.75
11	0	0.00	0.0		82.80
12	0	0.00	0.0		84.20
13	0	0.00	0.0		85.40
14	0	0.00	0.0		86.50
15	0	0.00	0.0		88.95
16	0	0.00	0.0		89.90
17	0	0.00	0.0		91.60
18	0	0.00	0.0		93.95
19	0	0.00	0.0		94.70
20	0	0.00	0.0		99.45
21	0	0.00	0.0		100.55
22	0	0.00	0.0		106.10
23	0	0.00	0.0		107.15
24	0	0.00	0.0		114.65
25	0	0.00	0.0		122.05

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 0 Noise: 0.3

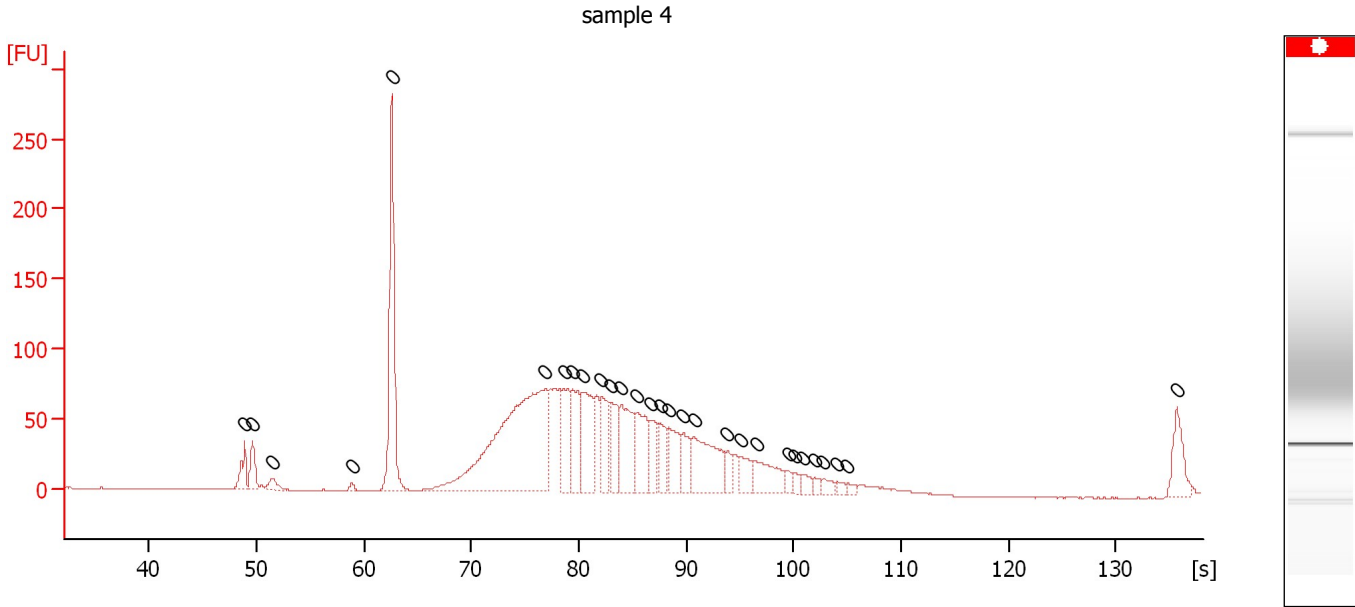
Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.15
2	0	0.00	0.0		50.10
3	0	0.00	0.0		52.05
4	0	0.00	0.0		63.35
5	0	0.00	0.0		76.95
6	0	0.00	0.0		77.90
7	0	0.00	0.0		78.90
8	0	0.00	0.0		79.70
9	0	0.00	0.0		80.75
10	0	0.00	0.0		81.80
11	0	0.00	0.0		86.10
12	0	0.00	0.0		89.15
13	0	0.00	0.0		90.55
14	0	0.00	0.0		93.85
15	0	0.00	0.0		96.50
16	0	0.00	0.0		97.40
17	0	0.00	0.0		100.45
18	0	0.00	0.0		102.05
19	0	0.00	0.0		105.45

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 0 Noise: 0.2

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		48.90
2	0	0.00	0.0		49.65
3	0	0.00	0.0		51.40
4	0	0.00	0.0		58.90
5	0	0.00	0.0		62.60
6	0	0.00	0.0		76.90
7	0	0.00	0.0		78.60
8	0	0.00	0.0		79.45
9	0	0.00	0.0		80.35
10	0	0.00	0.0		82.05
11	0	0.00	0.0		82.95
12	0	0.00	0.0		83.95
13	0	0.00	0.0		85.40
14	0	0.00	0.0		86.70
15	0	0.00	0.0		87.55
16	0	0.00	0.0		88.35
17	0	0.00	0.0		89.65
18	0	0.00	0.0		90.75
19	0	0.00	0.0		93.80
20	0	0.00	0.0		95.00
21	0	0.00	0.0		96.50
22	0	0.00	0.0		99.50
23	0	0.00	0.0		100.15
24	0	0.00	0.0		100.90
25	0	0.00	0.0		101.90
26	0	0.00	0.0		102.80
27	0	0.00	0.0		104.10

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
Modified: 1/4/2016 2:12:24 PM

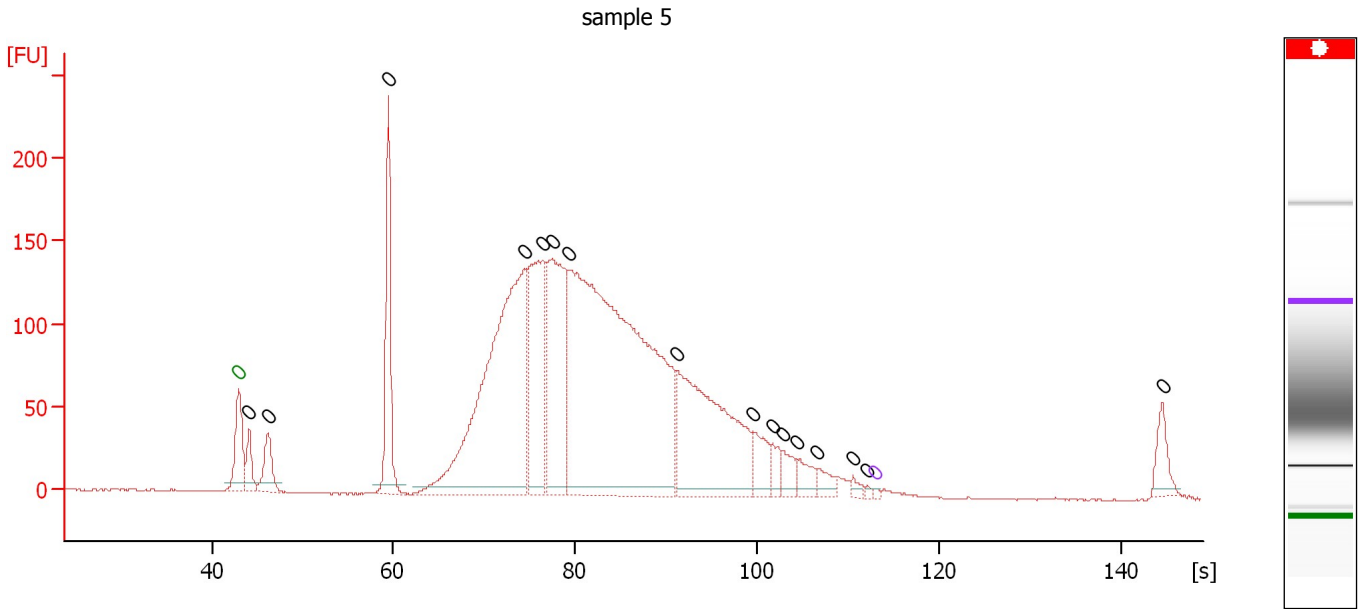
Electropherogram Summary Continued ...**... Peak table for sample 4 : sample 4**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
28	0	0.00	0.0		105.05
29	0	0.00	0.0		135.70

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 16 Noise: 0.4

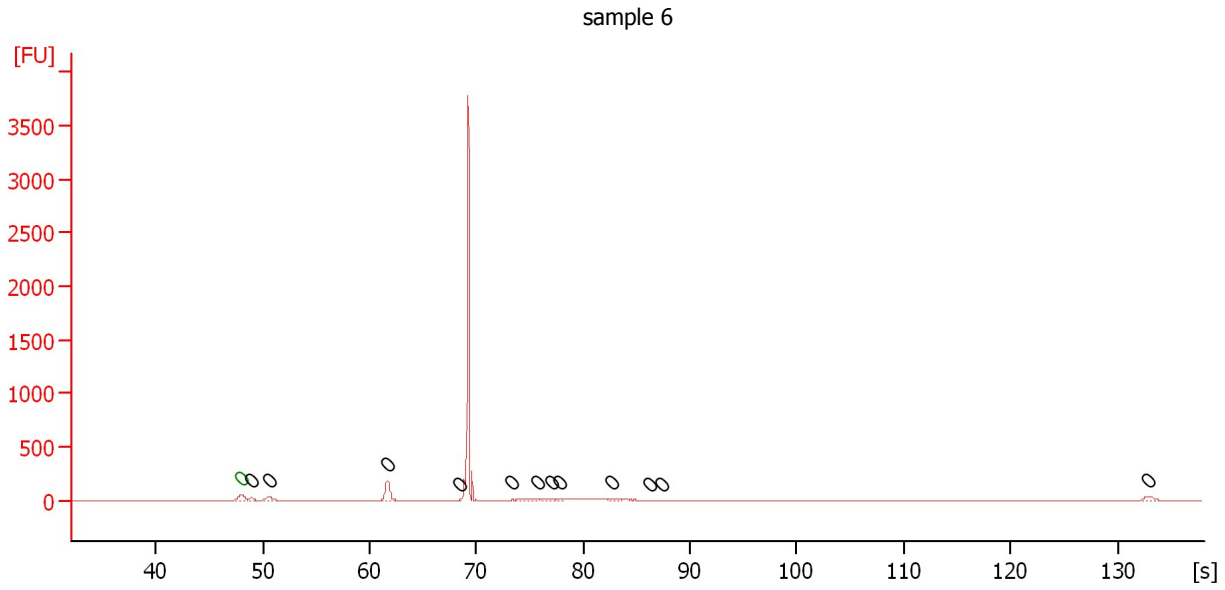
Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	43.00
2	0	0.00	0.0		44.12
3	0	0.00	0.0		46.19
4	0	0.00	0.0		59.41
5	0	0.00	0.0		74.40
6	0	0.00	0.0		76.41
7	0	0.00	0.0		77.41
8	0	0.00	0.0		79.36
9	0	0.00	0.0		91.10
10	0	0.00	0.0		99.54
11	0	0.00	0.0		101.67
12	0	0.00	0.0		102.73
13	0	0.00	0.0		104.44
14	0	0.00	0.0		106.63
15	0	0.00	0.0		110.52
16	0	0.00	0.0		111.94
17	0	0.00	0.0	Upper Marker	113.00
18	0	0.00	0.0		144.52

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 12 Noise: 0.3

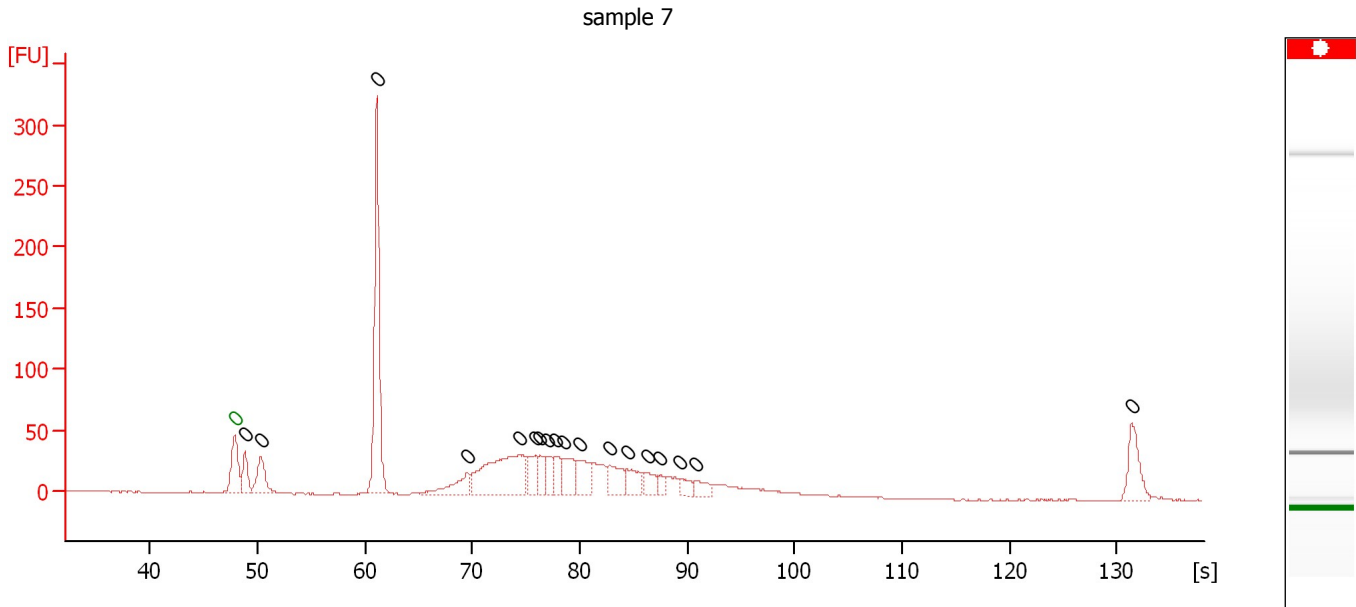
Peak table for sample 6 : sample 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	48.05
2	0	0.00	0.0		49.00
3	0	0.00	0.0		50.65
4	0	0.00	0.0		61.70
5	0	0.00	0.0		68.40
6	0	0.00	0.0		73.40
7	0	0.00	0.0		75.70
8	0	0.00	0.0		77.10
9	0	0.00	0.0		77.75
10	0	0.00	0.0		82.60
11	0	0.00	0.0		86.30
12	0	0.00	0.0		87.40
13	0	0.00	0.0		132.85

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 18 Noise: 0.3

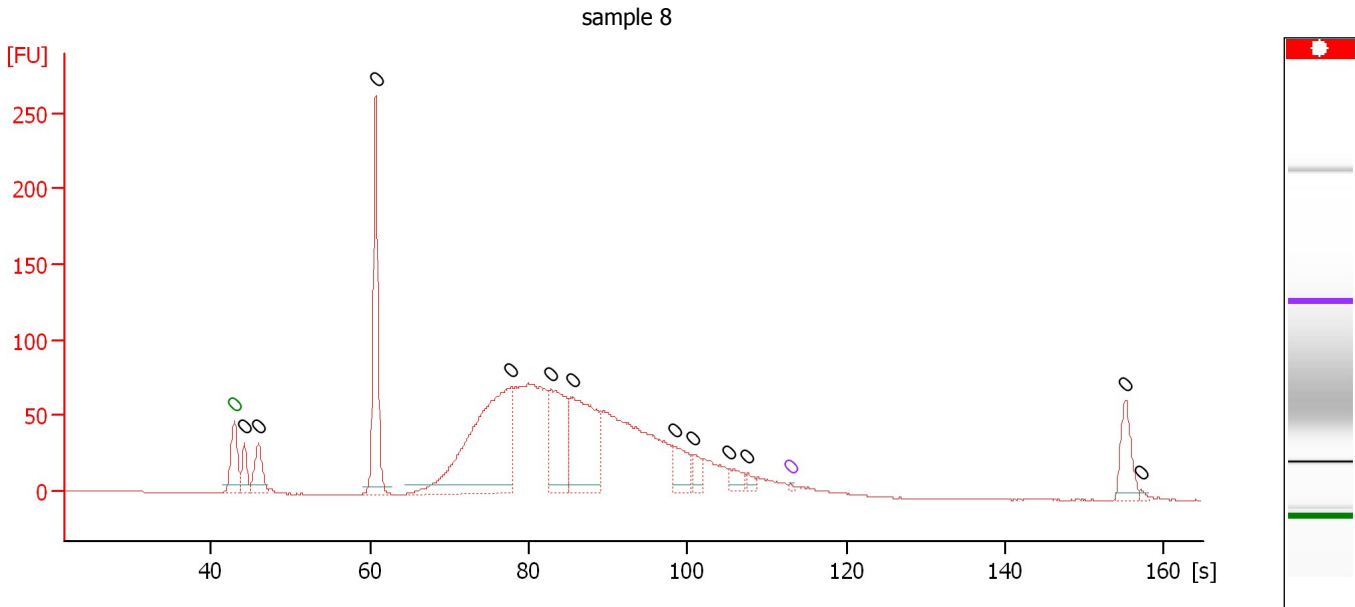
Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	47.90
2	0	0.00	0.0		48.85
3	0	0.00	0.0		50.30
4	0	0.00	0.0		61.10
5	0	0.00	0.0		69.55
6	0	0.00	0.0		74.40
7	0	0.00	0.0		75.85
8	0	0.00	0.0		76.30
9	0	0.00	0.0		77.05
10	0	0.00	0.0		77.70
11	0	0.00	0.0		78.45
12	0	0.00	0.0		79.90
13	0	0.00	0.0		82.75
14	0	0.00	0.0		84.40
15	0	0.00	0.0		86.30
16	0	0.00	0.0		87.50
17	0	0.00	0.0		89.35
18	0	0.00	0.0		90.75
19	0	0.00	0.0		131.35

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 12 Noise: 0.2

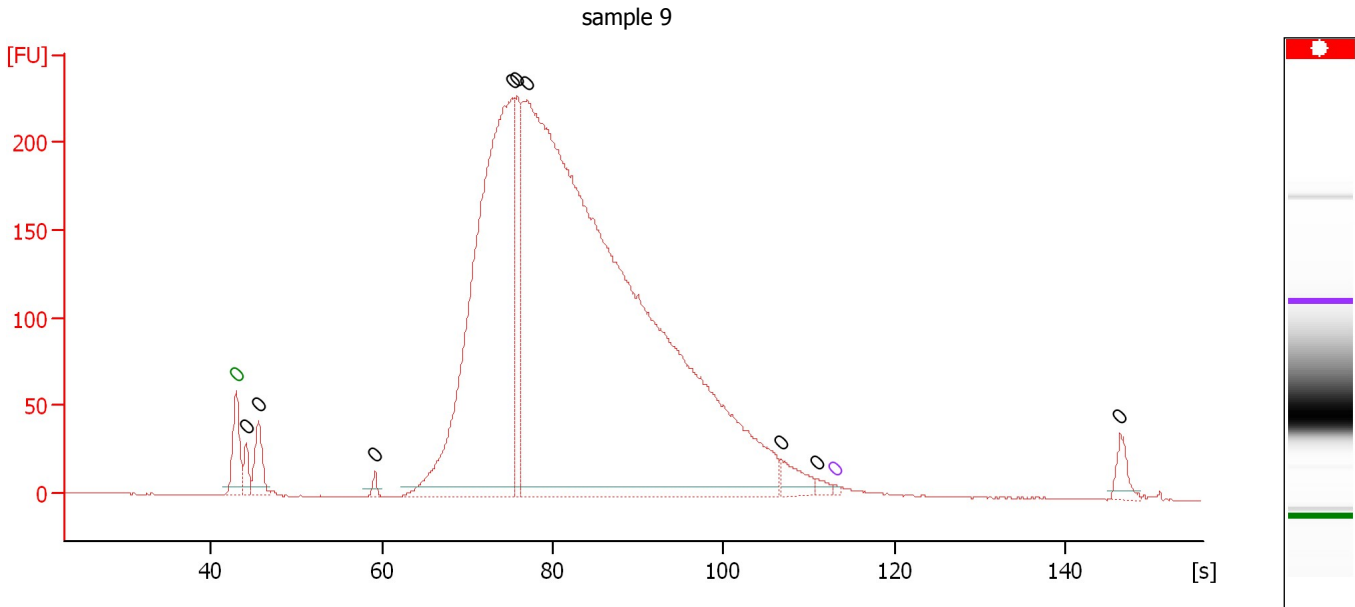
Peak table for sample 8 : sample 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	43.00
2	0	0.00	0.0		44.22
3	0	0.00	0.0		45.98
4	0	0.00	0.0		60.79
5	0	0.00	0.0		77.83
6	0	0.00	0.0		82.77
7	0	0.00	0.0		85.61
8	0	0.00	0.0		98.32
9	0	0.00	0.0		100.83
10	0	0.00	0.0		105.36
11	0	0.00	0.0		107.59
12	0	0.00	0.0	Upper Marker	113.00
13	0	0.00	0.0		155.14
14	0	0.00	0.0		157.16

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 9 Noise: 0.2

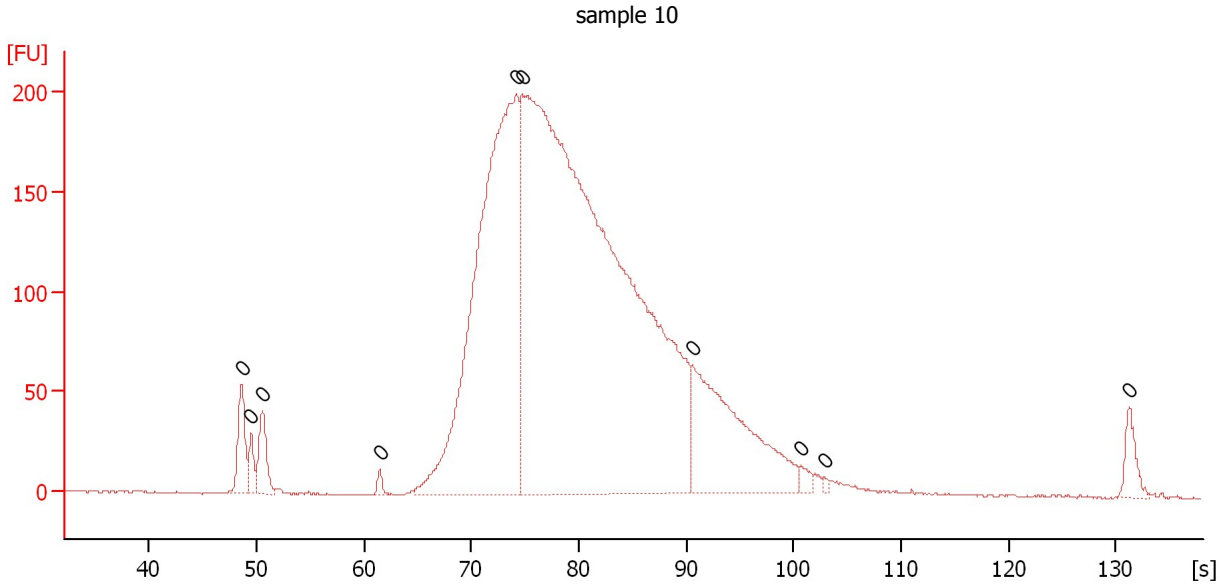
Peak table for sample 9 : sample 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	43.00
2	0	0.00	0.0		44.19
3	0	0.00	0.0		45.57
4	0	0.00	0.0		59.26
5	0	0.00	0.0		75.27
6	0	0.00	0.0		75.83
7	0	0.00	0.0		77.03
8	0	0.00	0.0		106.72
9	0	0.00	0.0		110.87
10	0	0.00	0.0	Upper Marker	113.00
11	0	0.00	0.0		146.34

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 0 Noise: 0.3

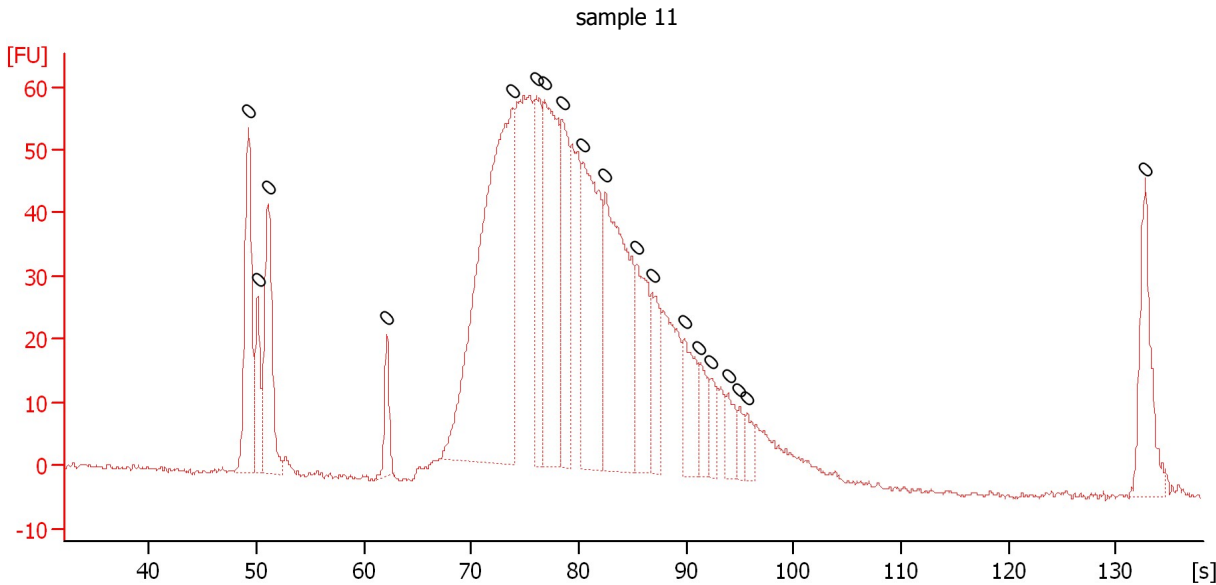
Peak table for sample 10 : sample 10

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		48.60
2	0	0.00	0.0		49.50
3	0	0.00	0.0		50.55
4	0	0.00	0.0		61.45
5	0	0.00	0.0		74.20
6	0	0.00	0.0		74.70
7	0	0.00	0.0		90.55
8	0	0.00	0.0		100.65
9	0	0.00	0.0		102.85
10	0	0.00	0.0		131.25

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 0 Noise: 0.4

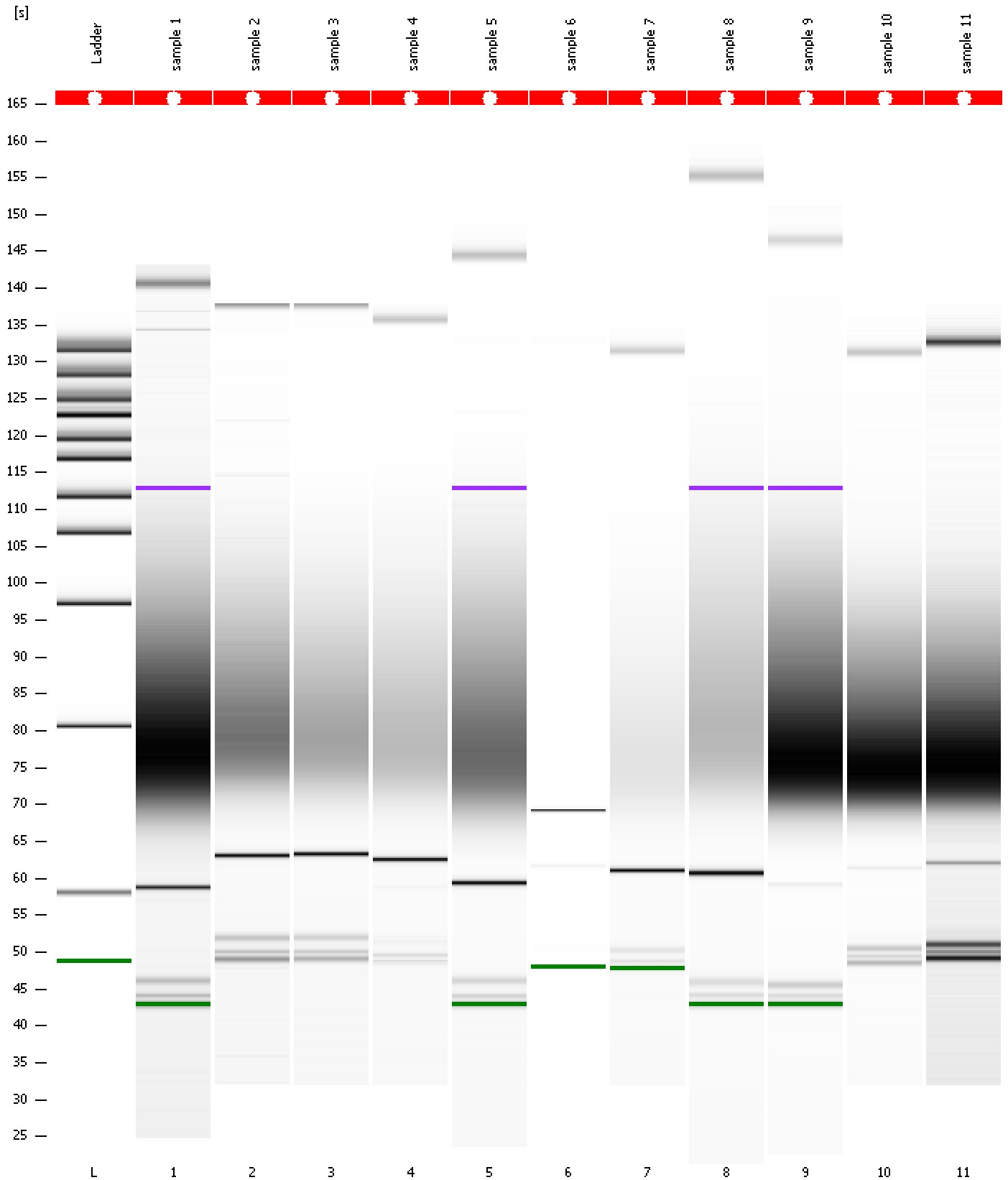
Peak table for sample 11 : sample 11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.25
2	0	0.00	0.0		50.10
3	0	0.00	0.0		51.05
4	0	0.00	0.0		62.15
5	0	0.00	0.0		73.75
6	0	0.00	0.0		76.10
7	0	0.00	0.0		76.85
8	0	0.00	0.0		78.45
9	0	0.00	0.0		80.35
10	0	0.00	0.0		82.50
11	0	0.00	0.0		85.35
12	0	0.00	0.0		86.80
13	0	0.00	0.0		89.85
14	0	0.00	0.0		91.20
15	0	0.00	0.0		92.35
16	0	0.00	0.0		93.90
17	0	0.00	0.0		94.95
18	0	0.00	0.0		95.60
19	0	0.00	0.0		132.70

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
Modified: 1/4/2016 2:12:24 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad

Created: 1/4/2016 1:31:06 PM
 Modified: 1/4/2016 2:12:24 PM

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		1/4/2016 2:12:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2016-01-04\2016-01-04_001.xad)		Instrument	Run		1/4/2016 1:31:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/4/2016 1:31:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/4/2016 1:31:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/4/2016 1:31:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/4/2016 1:31:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/4/2016 1:31:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/4/2016 1:31:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1