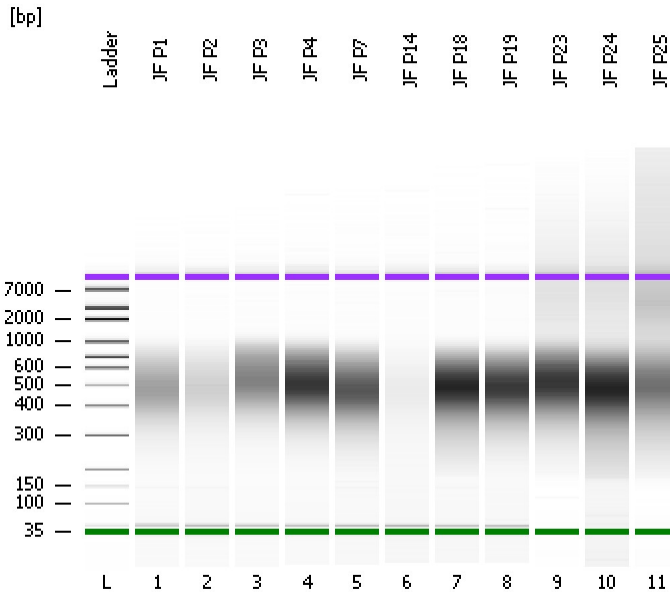


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
Modified: 9/10/2018 3:00:20 PM

Electrophoresis File Run Summary



Instrument Information:

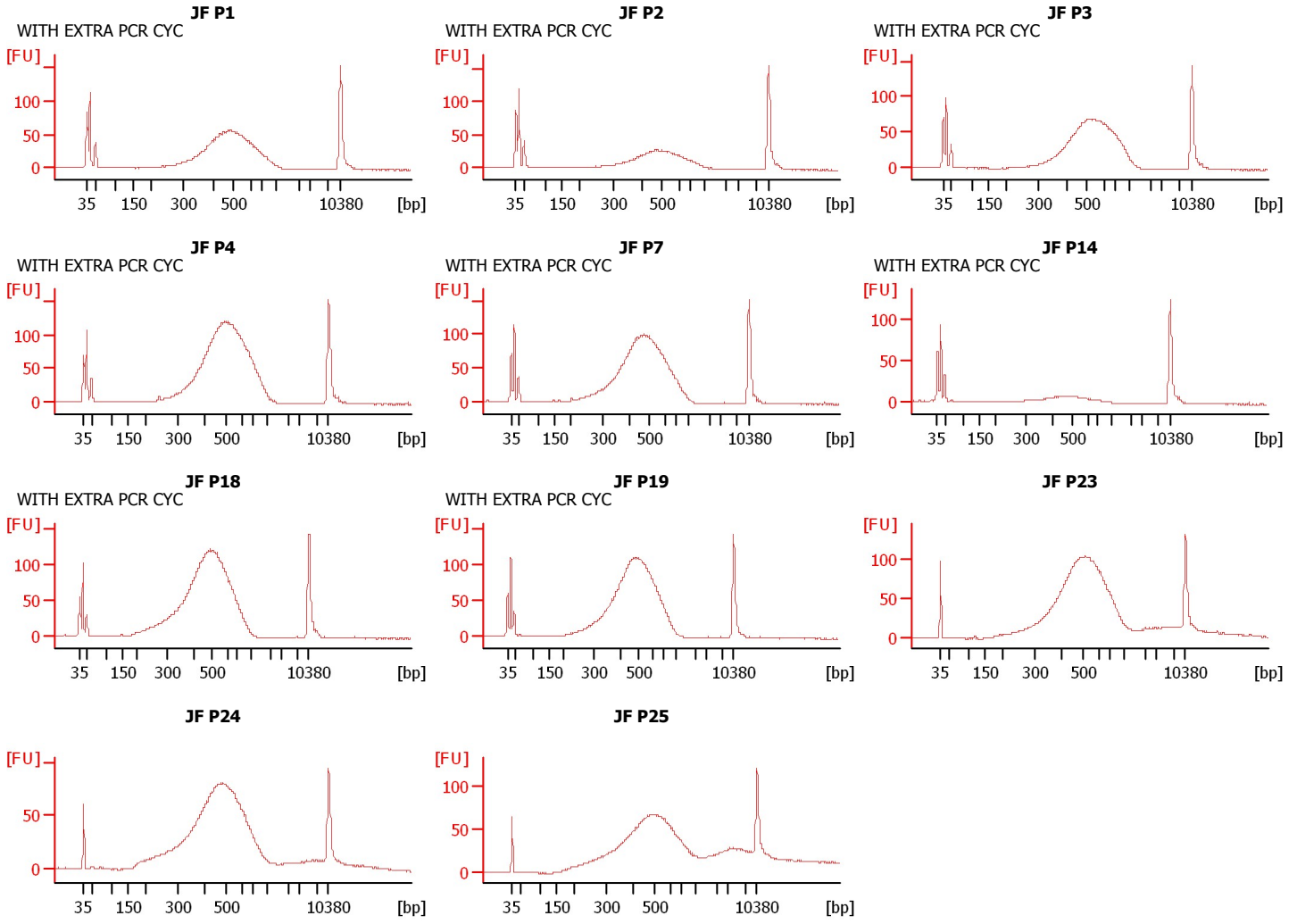
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
Modified: 9/10/2018 3:00:20 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
JF P1	WITH EXTRA PCR CYC	<input type="checkbox"/>	✓			
JF P2	WITH EXTRA PCR CYC	<input type="checkbox"/>	✓			
JF P3	WITH EXTRA PCR CYC	<input type="checkbox"/>	✓			
JF P4	WITH EXTRA PCR CYC	<input type="checkbox"/>	✓			
JF P7	WITH EXTRA PCR CYC	<input type="checkbox"/>	✓			
JF P14	WITH EXTRA PCR CYC	<input type="checkbox"/>	✓			
JF P18	WITH EXTRA PCR CYC	<input type="checkbox"/>	✓			
JF P19	WITH EXTRA PCR CYC	<input type="checkbox"/>	✓			
JF P23		<input type="checkbox"/>	✓			
JF P24		<input type="checkbox"/>	✓			
JF P25		<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\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
Modified: 9/10/2018 3:00:20 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

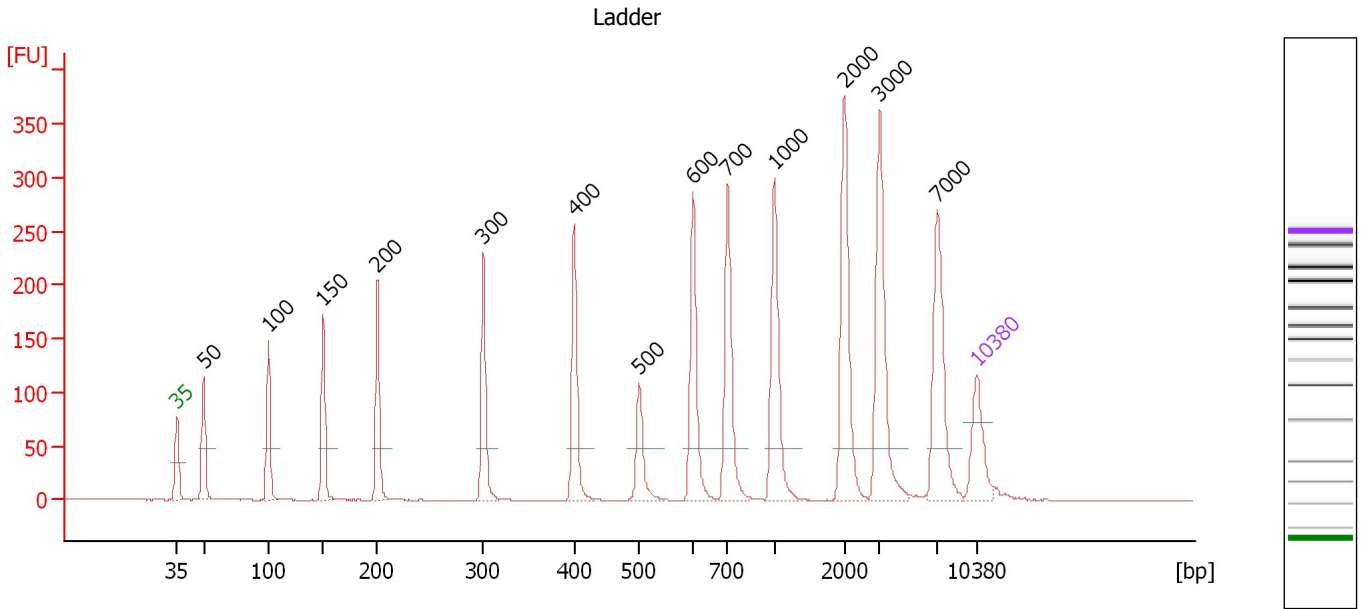
Ladder

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\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

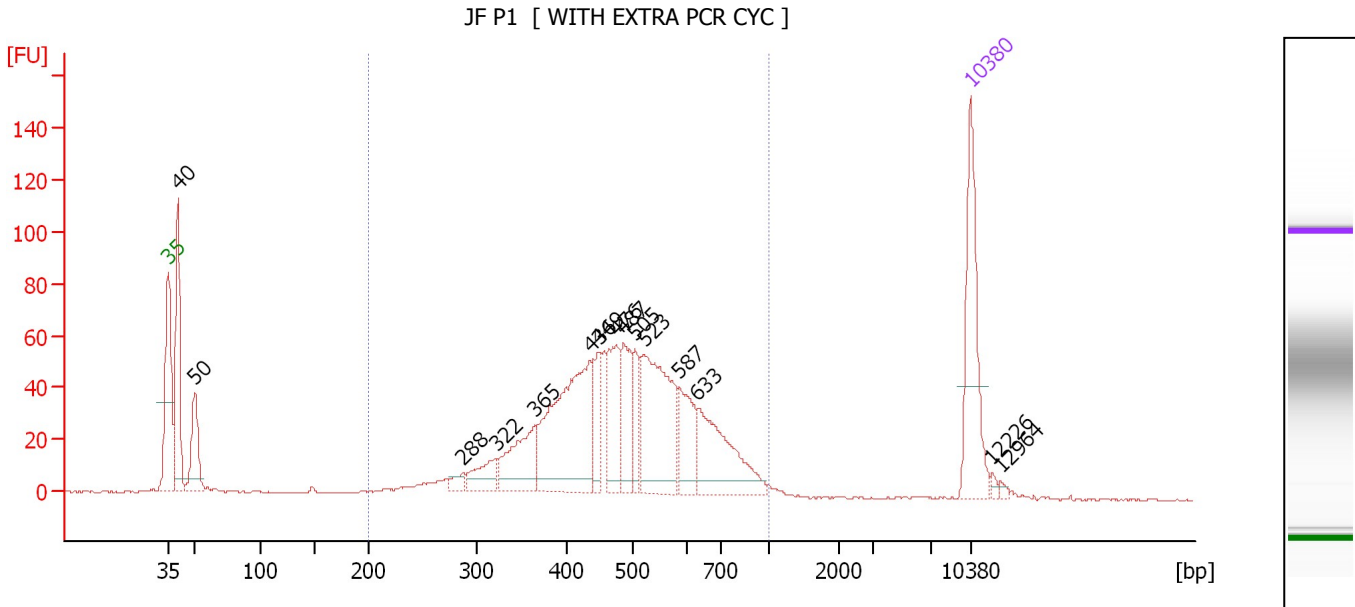
Peak table for Ladder

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	45.33
3	100	150.00	2,272.7	Ladder Peak	51.03
4	150	150.00	1,515.2	Ladder Peak	55.84
5	200	150.00	1,136.4	Ladder Peak	60.56
6	300	150.00	757.6	Ladder Peak	69.85
7	400	150.00	568.2	Ladder Peak	77.79
8	500	150.00	454.5	Ladder Peak	83.49
9	600	150.00	378.8	Ladder Peak	88.20
10	700	150.00	324.7	Ladder Peak	91.24
11	1,000	150.00	227.3	Ladder Peak	95.35
12	2,000	150.00	113.6	Ladder Peak	101.47
13	3,000	150.00	75.8	Ladder Peak	104.55
14	7,000	150.00	32.5	Ladder Peak	109.59
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : JF P1

Number of peaks found: 15 Corr. Area 1: 1,155.0
 Noise: 0.3

Peak table for sample 1 : JF P1

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	129.50	4,858.8		43.84
3	50	65.21	1,978.0		45.33
4	288	9.11	47.9		68.74
5	322	28.72	135.0		71.62
6	365	65.23	270.7		75.02
7	436	177.13	616.2		79.82
8	449	33.82	114.2		80.56
9	476	60.24	191.9		82.10
10	487	50.81	158.1		82.75
11	505	28.52	85.6		83.72
12	523	129.31	374.8		84.56
13	587	48.02	124.0		87.59
14	633	86.09	205.9		89.22
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,226	0.00	0.0		114.86
17	12,964	0.00	0.0		115.61

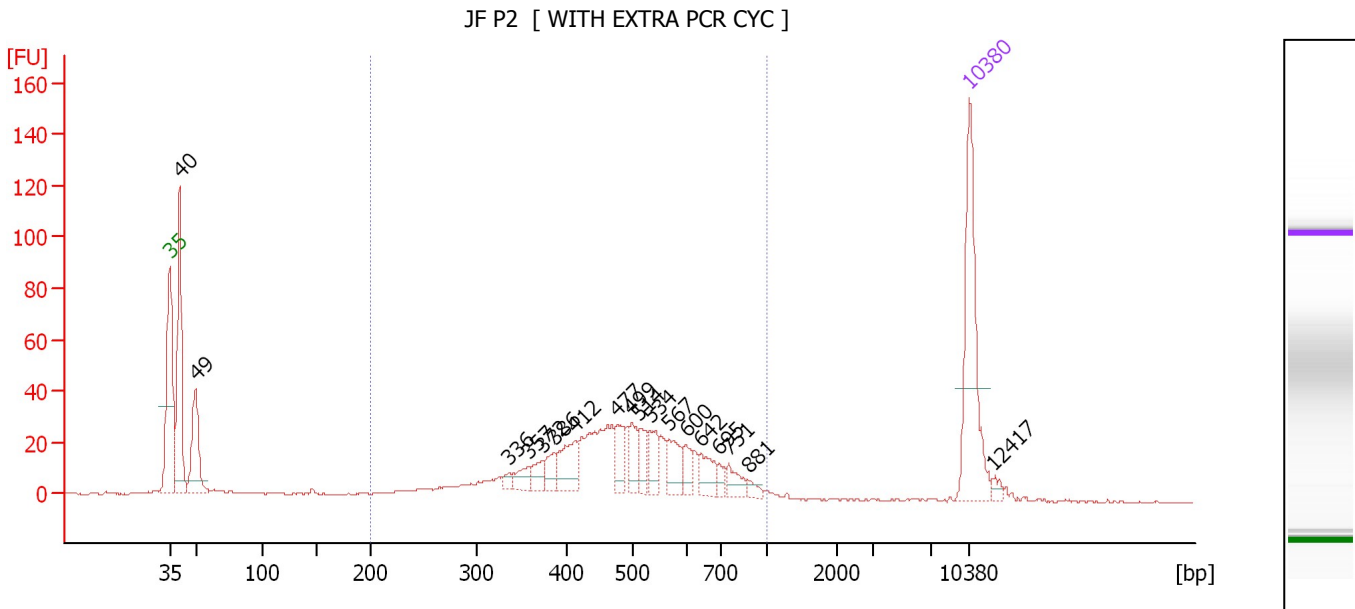
Region table for sample 1 : JF P1

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	494	809.48	1,155.0	2,745.9	84	26.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : JF P2

Number of peaks found: 18 Corr. Area 1: 596.2
 Noise: 0.3

Peak table for sample 2 : JF P2

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	134.38	5,039.9		43.84
3	49	69.74	2,139.0		45.24
4	336	5.14	23.2		72.70
5	357	11.29	47.9		74.38
6	372	11.60	47.2		75.60
7	386	12.77	50.1		76.67
8	412	29.62	108.9		78.49
9	477	18.04	57.3		82.18
10	499	19.73	59.9		83.44
11	514	16.58	48.9		84.14
12	534	17.23	48.9		85.07
13	567	22.69	60.6		86.66
14	600	11.47	29.0		88.20
15	642	17.47	41.3		89.46
16	695	6.24	13.6		91.10
17	751	12.11	24.4		91.94
18	881	4.59	7.9		93.71
19	10,380	75.00	10.9	Upper Marker	113.00
20	12,417	0.00	0.0		115.05

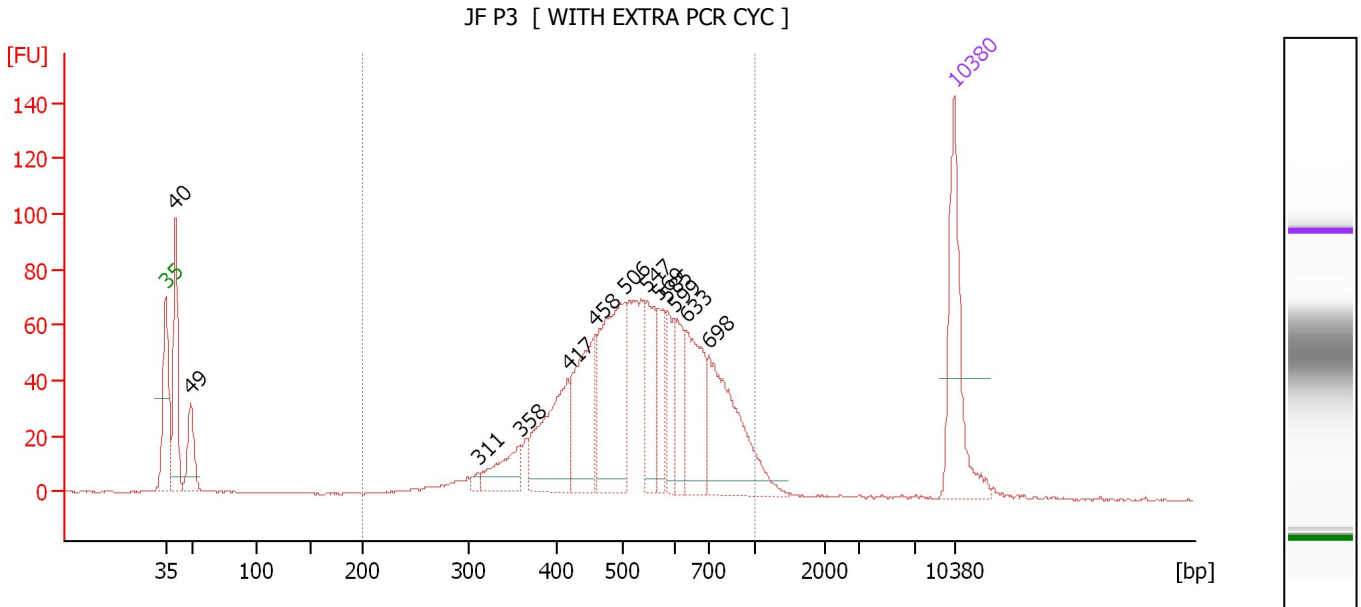
Region table for sample 2 : JF P2

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	495	406.90	596.2	1,398.5	70	28.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : JF P3

Number of peaks found: 13 Corr. Area 1: 1,364.1
 Noise: 0.3

Peak table for sample 3 : JF P3

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	112.05	4,194.6		43.85
3	49	51.60	1,586.2		45.22
4	311	5.05	24.6		70.73
5	358	39.59	167.7		74.43
6	417	98.17	357.1		78.73
7	458	97.59	322.8		81.10
8	506	139.79	418.9		83.75
9	547	55.93	155.0		85.69
10	569	40.94	109.0		86.73
11	585	31.75	82.2		87.49
12	599	40.52	102.5		88.15
13	633	73.67	176.5		89.19
14	698	121.42	263.5		91.18
15	10,380	75.00	10.9	Upper Marker	113.00

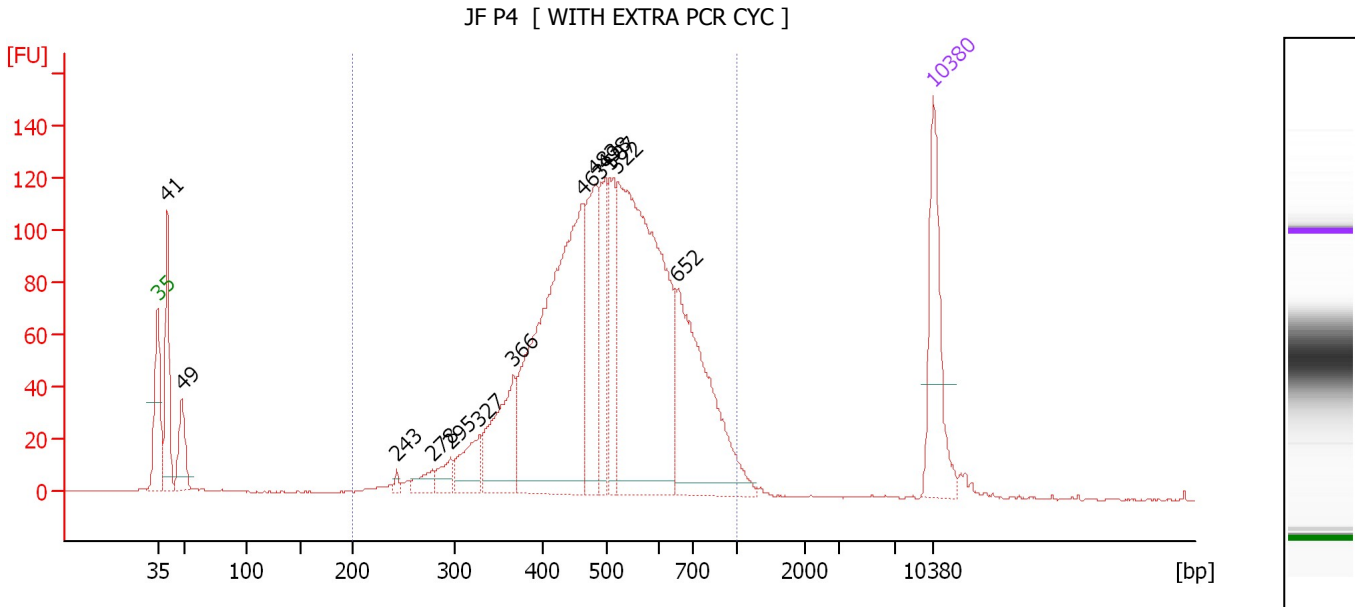
Region table for sample 3 : JF P3

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	545	905.47	1,364.1	2,772.7	87	26.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : JF P4

Number of peaks found: 13 Corr. Area 1: 2,307.1
 Noise: 0.3

Peak table for sample 4 : JF P4

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	113.53	4,237.6		43.87
3	49	53.05	1,640.8		45.18
4	243	4.37	27.3		64.53
5	278	15.61	85.1		67.82
6	295	19.47	99.9		69.41
7	327	43.67	202.1		72.03
8	366	96.00	397.0		75.12
9	463	396.16	1,297.2		81.36
10	483	113.03	354.5		82.52
11	498	69.33	210.8		83.39
12	507	68.74	205.3		83.83
13	522	417.69	1,213.3		84.51
14	652	189.93	441.4		89.78
15	10,380	75.00	10.9	Upper Marker	113.00

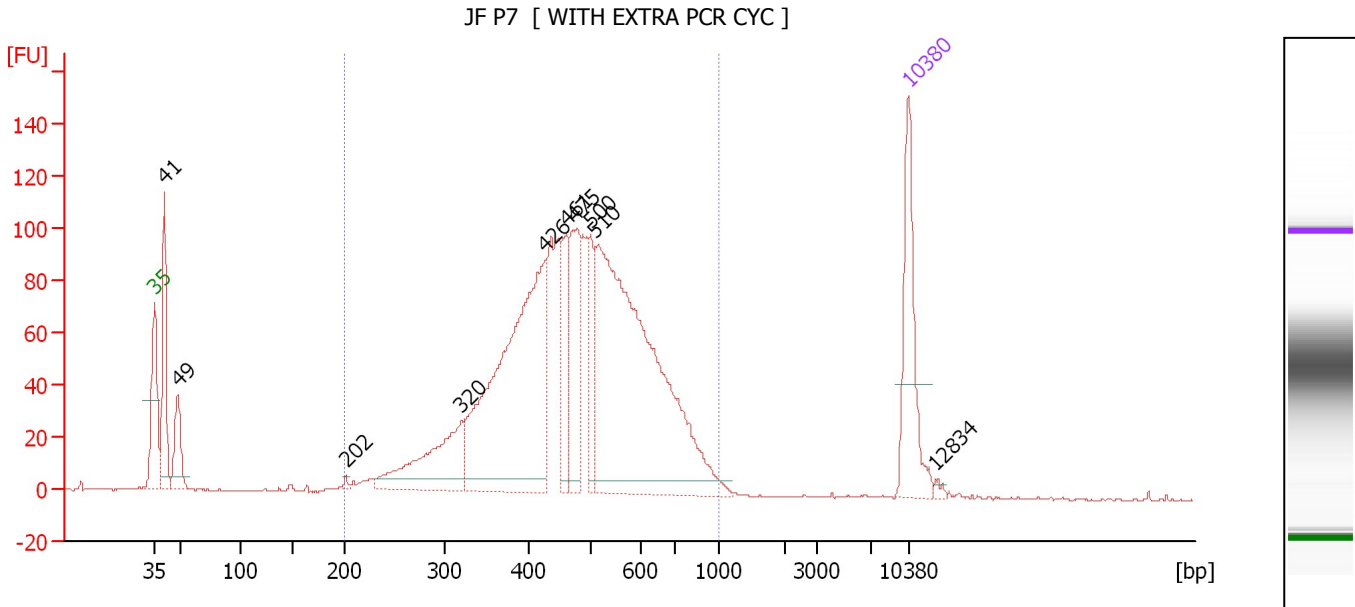
Region table for sample 4 : JF P4

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	517	1,464.03	2,307.1	4,715.4	90	25.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : JF P7

Number of peaks found: 10 Corr. Area 1: 2,050.5
 Noise: 0.3

Peak table for sample 5 : JF P7

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	122.60	4,561.1		43.89
3	49	58.02	1,806.1		45.13
4	202	2.92	21.8		60.77
5	320	118.21	559.1		71.47
6	426	375.72	1,335.4		79.29
7	461	57.88	190.2		81.27
8	475	95.86	305.8		82.06
9	500	51.47	155.9		83.50
10	510	487.28	1,448.7		83.94
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,834	0.00	0.0		115.48

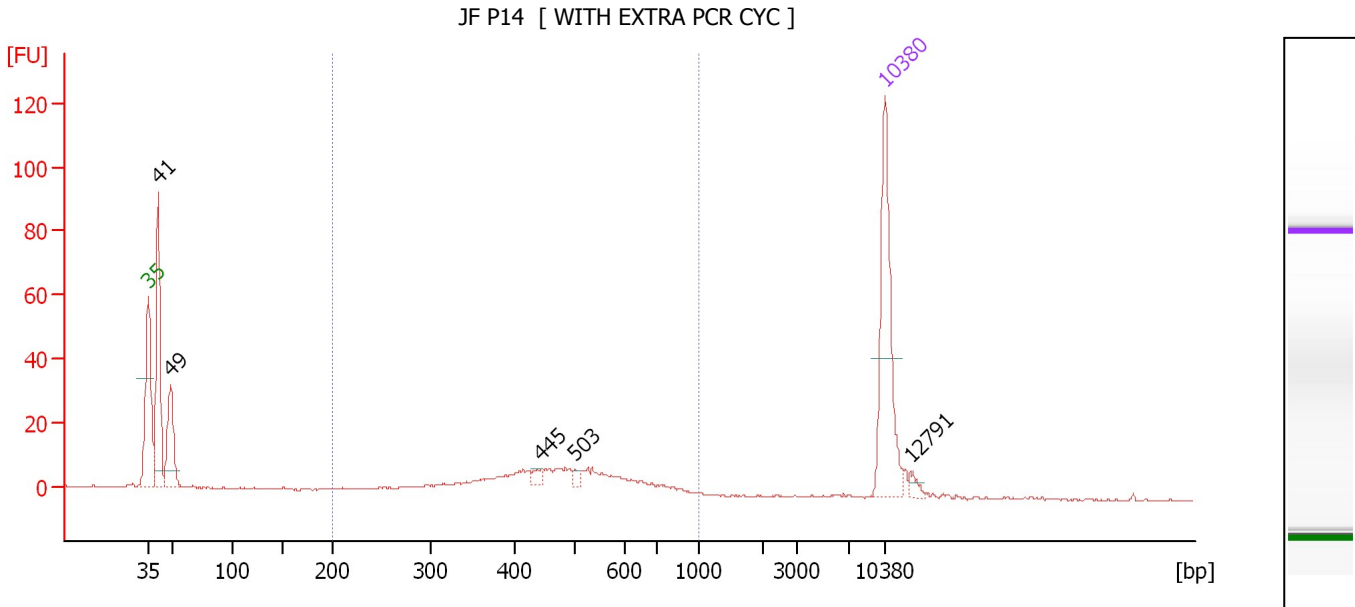
Region table for sample 5 : JF P7

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	484	1,371.49	2,050.5	4,757.1	90	26.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : JF P14

Number of peaks found: 5 Corr. Area 1: 162.5
 Noise: 0.2

Peak table for sample 6 : JF P14

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	125.87	4,631.0		43.96
3	49	63.78	1,985.5		45.13
4	445	5.66	19.3		80.38
5	503	4.24	12.8		83.62
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,791	0.00	0.0		115.43

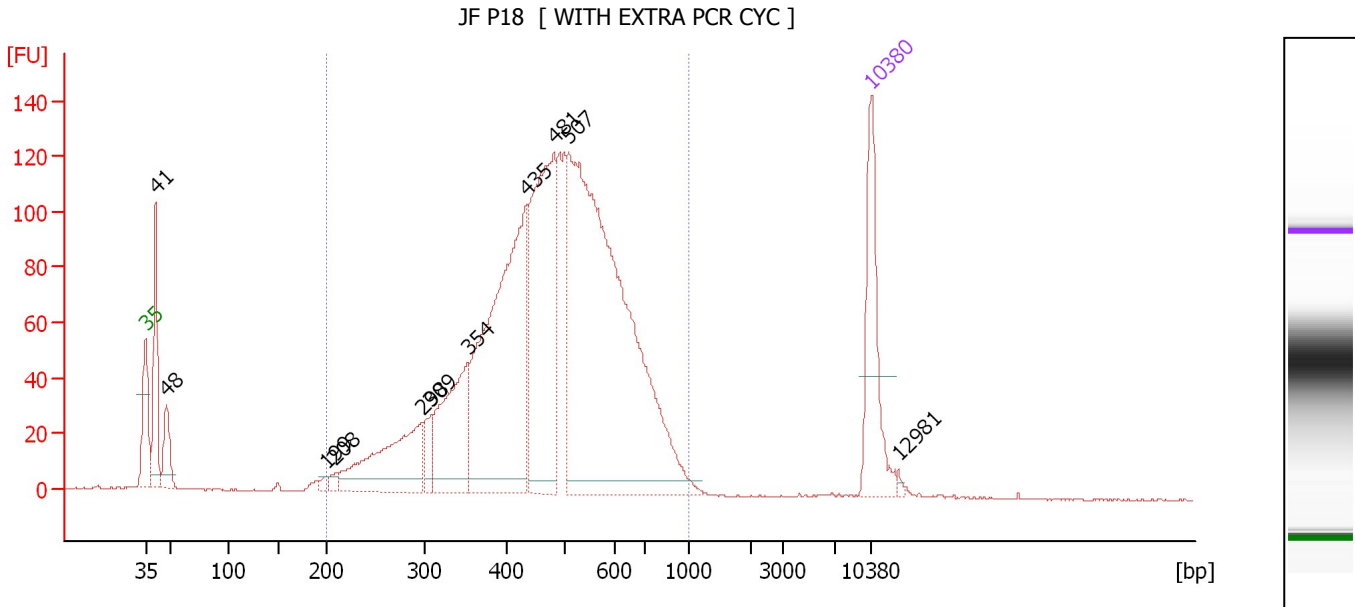
Region table for sample 6 : JF P14

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	479	139.21	162.5	494.1	47	27.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : JF P18

Number of peaks found: 11 Corr. Area 1: 2,445.6
 Noise: 0.3

Peak table for sample 7 : JF P18

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	108.52	3,983.3		43.98
3	48	45.65	1,434.4		45.06
4	199	6.12	46.6		60.44
5	208	6.77	49.3		61.31
6	298	134.01	681.9		69.64
7	309	25.11	123.1		70.57
8	354	124.87	534.9		74.12
9	435	347.10	1,209.4		79.77
10	481	263.75	831.0		82.40
11	507	626.34	1,870.2		83.84
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,981	0.00	0.0		115.62

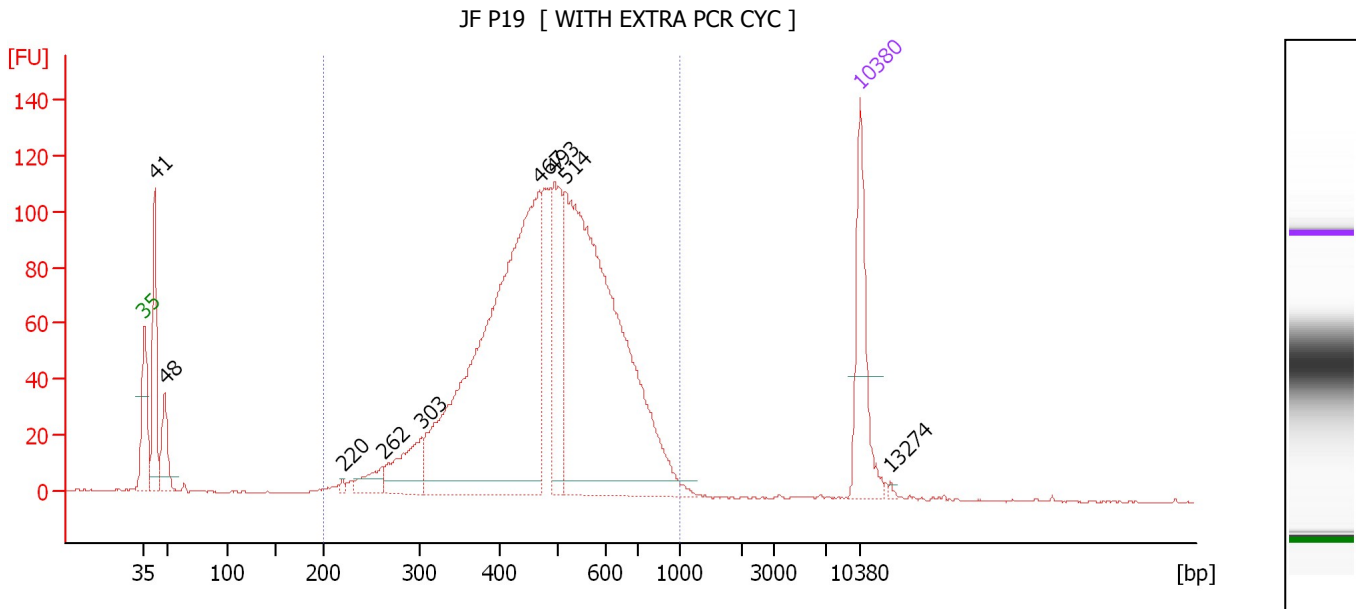
Region table for sample 7 : JF P18

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	484	1,603.72	2,445.6	5,608.9	92	26.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : JF P19

Number of peaks found: 9 Corr. Area 1: 2,117.9
 Noise: 0.2

Peak table for sample 8 : JF P19

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	130.13	4,766.8		43.99
3	48	59.19	1,879.3		44.98
4	220	4.02	27.7		62.39
5	262	26.33	152.4		66.30
6	303	69.19	345.8		70.10
7	467	645.65	2,093.6		81.62
8	493	115.80	356.0		83.08
9	514	612.49	1,807.2		84.12
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,274	0.00	0.0		115.92

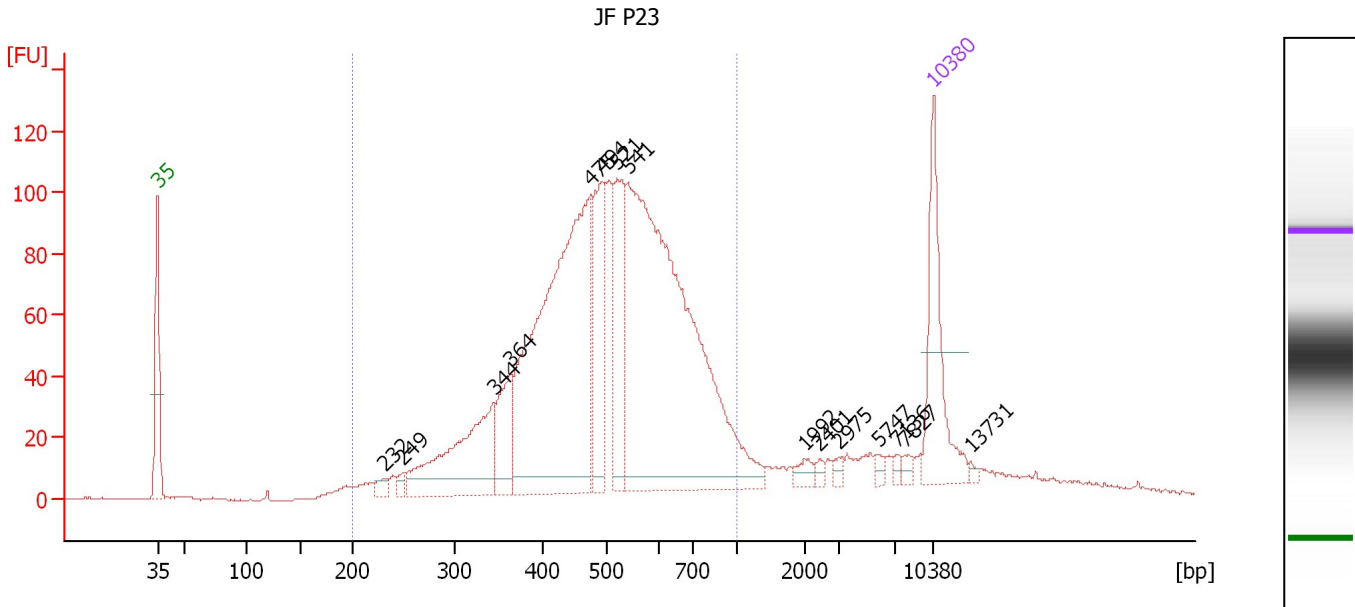
Region table for sample 8 : JF P19

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	492	1,576.28	2,117.9	5,339.7	92	25.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : JF P23

Number of peaks found: 15 Corr. Area 1: 2,080.3
 Noise: 0.2

Peak table for sample 9 : JF P23

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	232	9.31	60.9		63.49
3	249	8.08	49.1		65.15
4	344	143.21	630.4		73.36
5	364	58.24	242.6		74.92
6	475	441.93	1,410.3		82.05
7	494	104.59	321.0		83.12
8	521	88.81	258.4		84.46
9	541	552.26	1,546.2		85.43
10	1,992	8.45	6.4		101.41
11	2,401	3.99	2.5		102.70
12	2,975	4.93	2.5		104.47
13	5,747	5.29	1.4		108.01
14	7,136	4.31	0.9		109.73
15	7,827	4.67	0.9		110.43
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,731	0.00	0.0		116.38

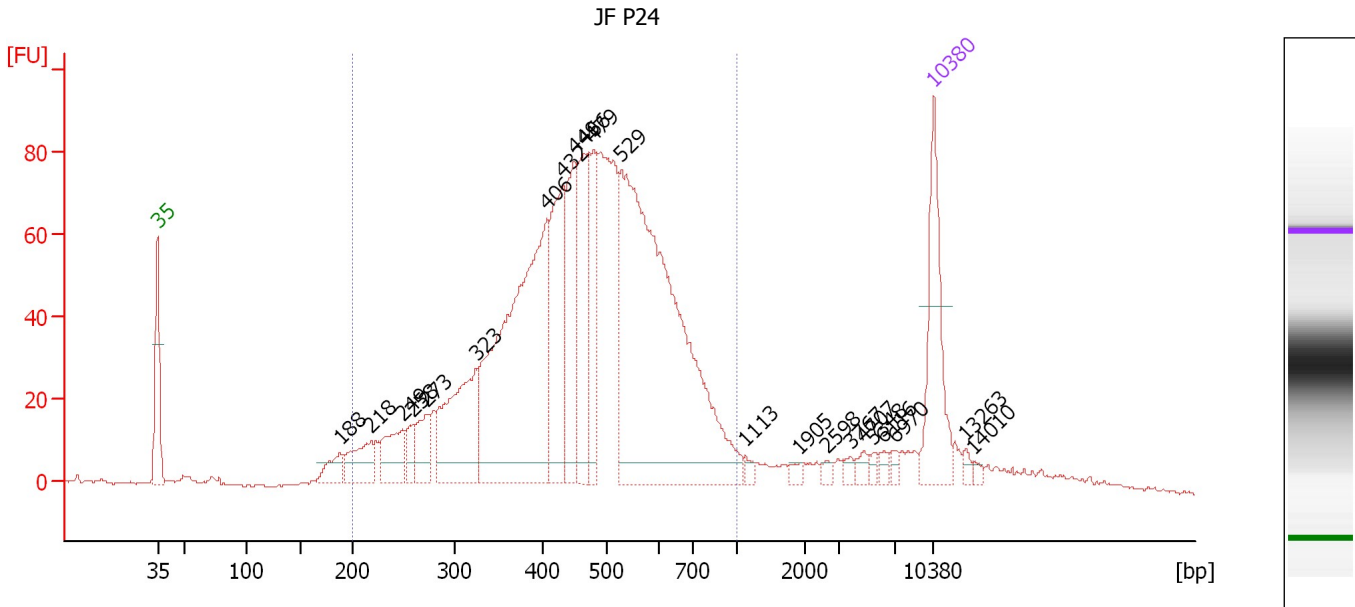
Region table for sample 9 : JF P23

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	513	1,537.84	2,080.3	5,108.4	86	28.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : JF P24

Number of peaks found: 22 Corr. Area 1: 1,782.9
 Noise: 0.4

Peak table for sample 10 : JF P24


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	25.31	204.0		59.42
3	218	44.83	310.9		62.28
4	249	49.22	299.9		65.08
5	258	17.59	103.1		65.99
6	273	35.31	196.0		67.34
7	323	130.33	610.8		71.70
8	406	366.63	1,369.6		78.11
9	432	122.79	430.6		79.62
10	449	101.77	343.4		80.58
11	466	110.92	360.6		81.55
12	479	68.95	218.0		82.31
13	529	524.23	1,502.5		84.84
14	1,113	4.80	6.5		96.04
15	1,905	4.57	3.6		100.88
16	2,598	4.17	2.4		103.31
17	3,767	5.01	2.0		105.52
18	4,707	6.21	2.0		106.70
19	5,348	3.72	1.1		107.51
20	6,116	4.17	1.0		108.48
21	6,970	3.98	0.9		109.55
22	10,380	75.00	10.9	Upper Marker	113.00
23	13,263	0.00	0.0		115.91
24	14,010	0.00	0.0		116.66

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...

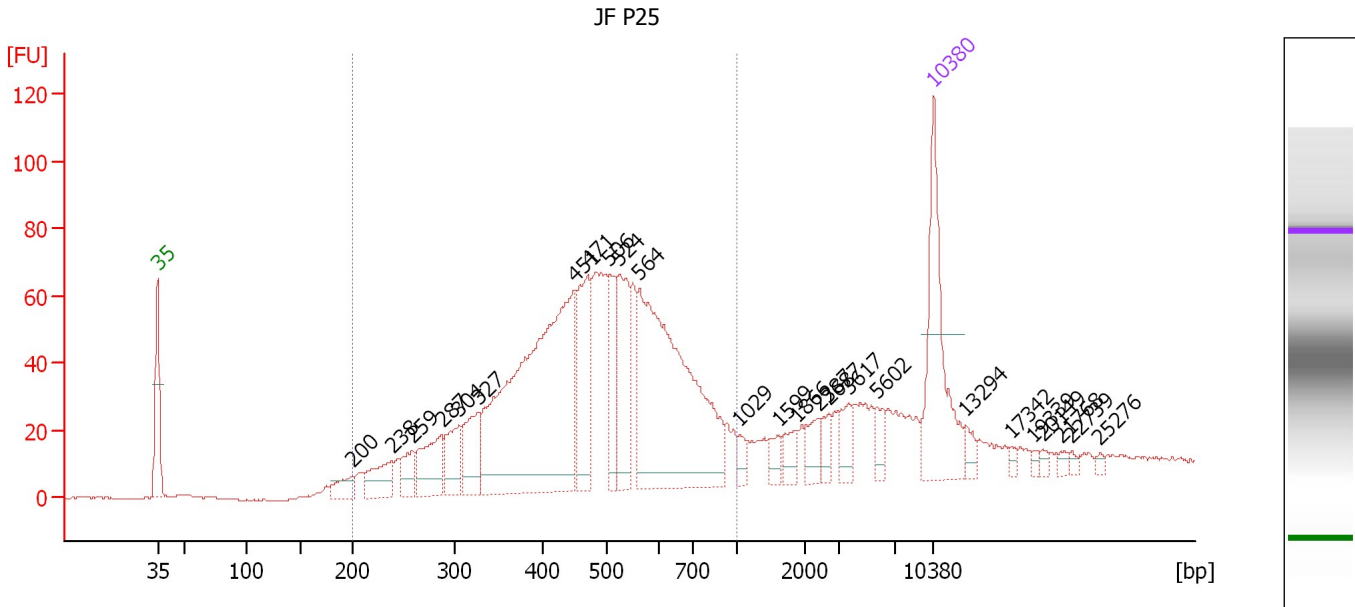
... Region table for sample 10 : JF P24

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	476	1,829.69	1,782.8	6,646.1	 87	29.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
 Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : JF P25

Number of peaks found: 25 Corr. Area 1: 1,413.7
 Noise: 0.3

Peak table for sample 11 : JF P25

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	200	17.09	129.3		60.58
3	238	32.81	208.6		64.12
4	259	21.74	127.3		66.02
5	287	46.32	244.6		68.64
6	304	33.53	167.1		70.16
7	327	41.51	192.2		72.01
8	451	312.33	1,050.5		80.67
9	471	70.91	228.3		81.81
10	506	38.40	115.0		83.77
11	524	64.81	187.2		84.64
12	564	239.41	643.5		86.49
13	1,029	8.36	12.3		95.53
14	1,599	9.02	8.6		99.01
15	1,866	11.61	9.4		100.64
16	2,387	13.00	8.3		102.66
17	2,687	9.48	5.3		103.58
18	3,617	14.29	6.0		105.33
19	5,602	10.15	2.7		107.83
20	10,380	75.00	10.9	Upper Marker	113.00
21	13,294	0.00	0.0		115.94
22	17,342	0.00	0.0		120.02
23	19,339	0.00	0.0		122.04
24	20,149	0.00	0.0		122.85
25	21,768	0.00	0.0		124.49

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
Modified: 9/10/2018 3:00:20 PM

Electropherogram Summary Continued ...**... Peak table for sample 11 : JF P25**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	22,739	0.00	0.0		125.47
27	25,276	0.00	0.0		128.02

Region table for sample 11 : JF P25

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	491	1,034.01	1,413.7	3,670.6	 76	30.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-09-10\2018-09-10_002.xad

Created: 9/10/2018 2:19:01 PM
Modified: 9/10/2018 3:00:20 PM

Gel Image

