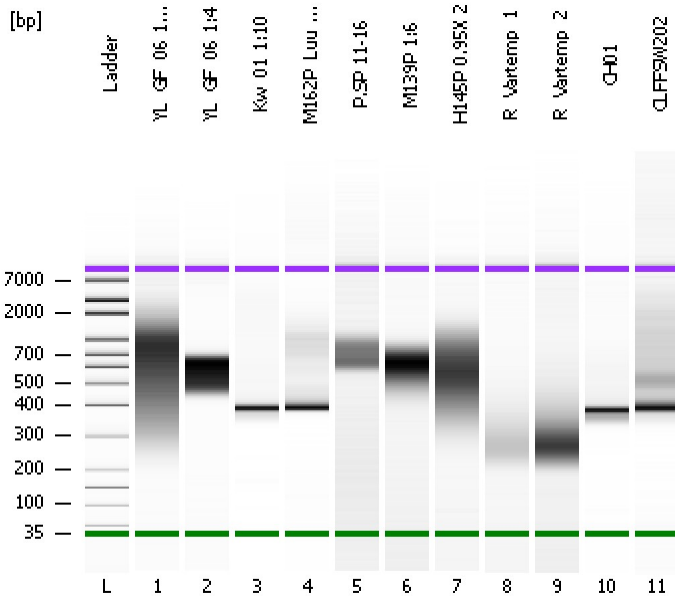


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
Modified: 7/23/2015 9:44:01 AM

Electrophoresis File Run Summary



Instrument Information:

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

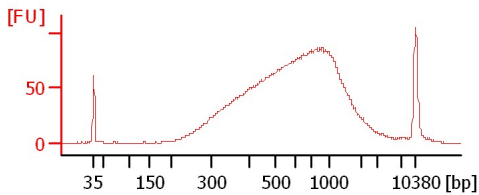
Assay Information:

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

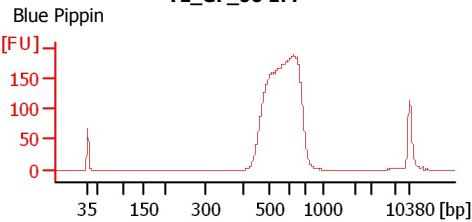
Chip Information:

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

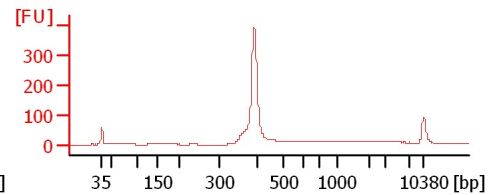
YL_GF_06 1:20



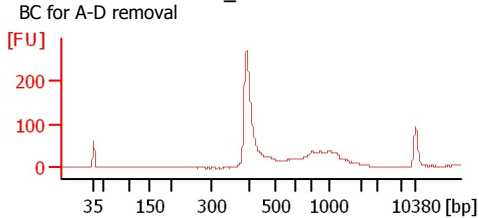
YL_GF_06 1:4



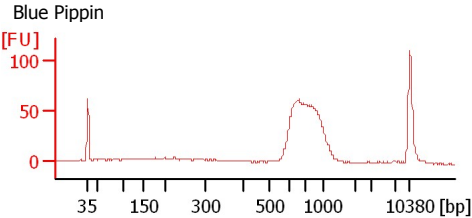
Kw_01 1:10



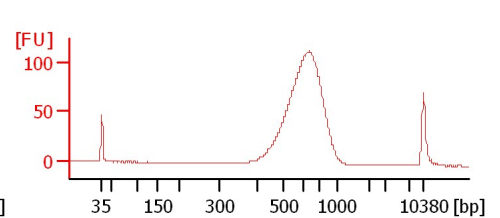
M162P_Luu 1:10



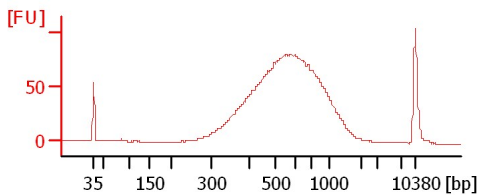
P.SP 11-16



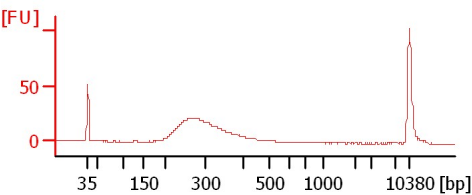
M139P 1:6



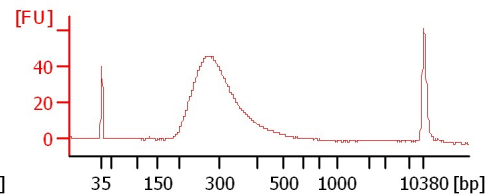
H145P 0.95X 2



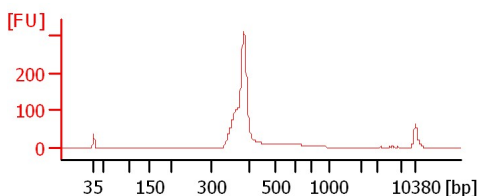
R_Vartemp_1



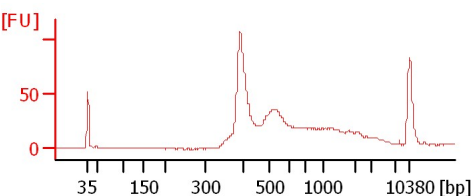
R_Vartemp_2



CH01



CLFFSW202



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
Modified: 7/23/2015 9:44:01 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
YL_GF_06 1:20		<input type="checkbox"/>	✓			
YL_GF_06 1:4	Blue Pippin	<input type="checkbox"/>	✓			
Kw_01 1:10		<input type="checkbox"/>	✓			
M162P_Luu 1:10	BC for A-D removal	<input type="checkbox"/>	✓			
P.SP 11-16	Blue Pippin	<input type="checkbox"/>	✓			
M139P 1:6		<input type="checkbox"/>	✓			
H145P 0.95X 2		<input type="checkbox"/>	✓			
R_Vartemp_1		<input type="checkbox"/>	✓			
R_Vartemp_2		<input type="checkbox"/>	✓			
CH01		<input type="checkbox"/>	✓			
CLFFSW202		<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\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
Modified: 7/23/2015 9:44:01 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

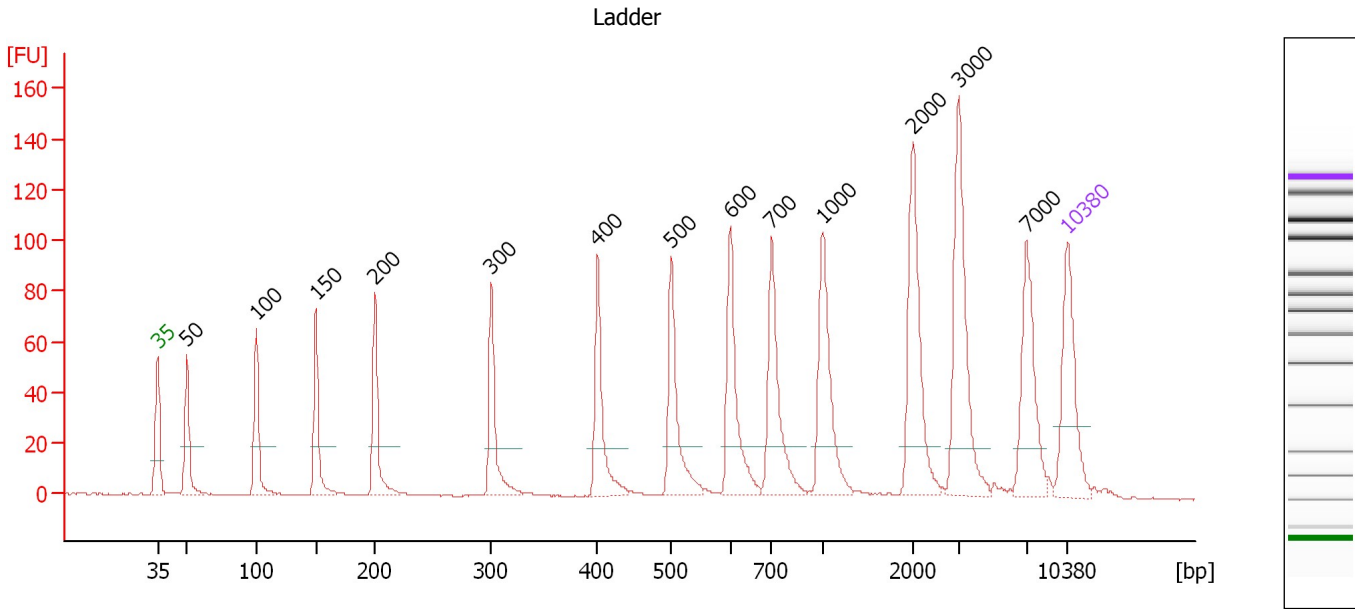
Ladder

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:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

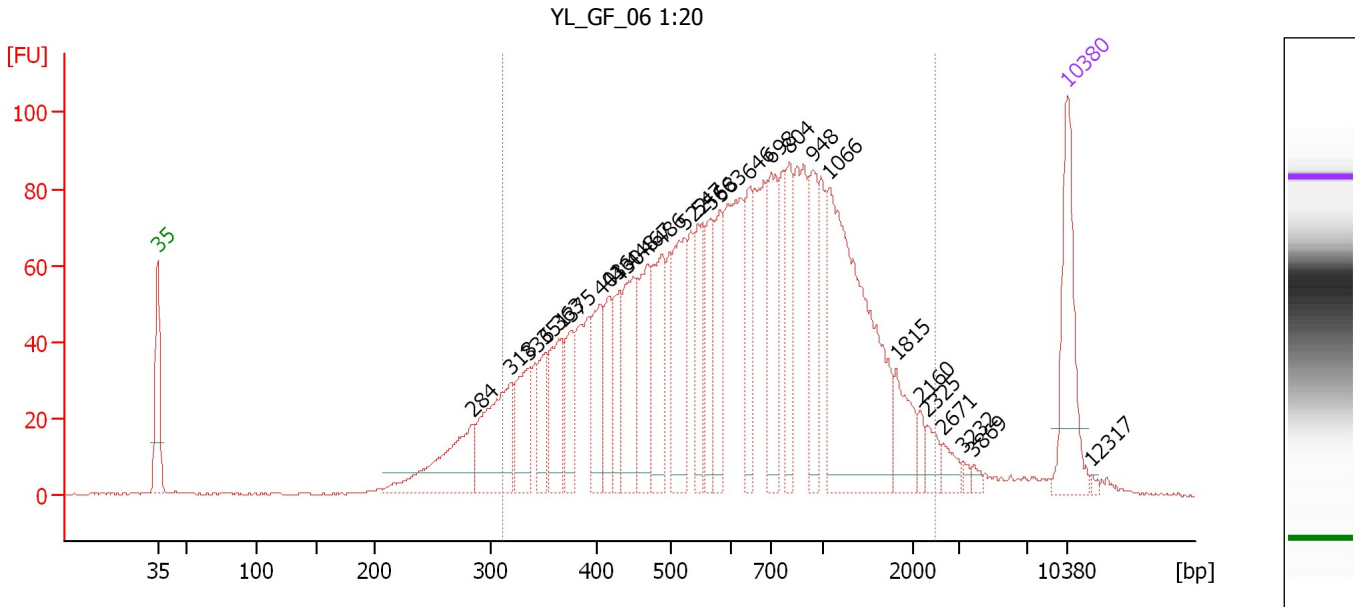
Peak table for Ladder

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	45.25
3	100	150.00	2,272.7	Ladder Peak	50.60
4	150	150.00	1,515.2	Ladder Peak	55.19
5	200	150.00	1,136.4	Ladder Peak	59.73
6	300	150.00	757.6	Ladder Peak	68.68
7	400	150.00	568.2	Ladder Peak	76.85
8	500	150.00	454.5	Ladder Peak	82.54
9	600	150.00	378.8	Ladder Peak	87.04
10	700	150.00	324.7	Ladder Peak	90.24
11	1,000	150.00	227.3	Ladder Peak	94.11
12	2,000	150.00	113.6	Ladder Peak	101.09
13	3,000	150.00	75.8	Ladder Peak	104.63
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:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : YL_GF_06_1:20

Number of peaks found: 28 Corr. Area 1: 2,256.3
 Noise: 0.2

Peak table for sample 1 : YL_GF_06_1:20

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	284	99.85	532.7		67.25
3	318	114.84	547.6		70.13
4	336	62.43	281.8		71.60
5	351	37.10	160.3		72.82
6	363	70.40	293.7		73.84
7	375	44.14	178.6		74.77
8	403	64.13	241.1		77.02
9	416	43.28	157.7		77.76
10	430	44.26	156.1		78.54
11	448	92.31	312.4		79.56
12	467	81.13	263.0		80.69
13	486	83.60	260.5		81.76
14	522	94.01	273.0		83.52
15	547	60.31	167.1		84.65
16	566	52.00	139.1		85.53
17	583	59.81	155.5		86.26
18	646	59.23	138.9		88.51
19	698	80.20	174.1		90.17
20	804	60.39	113.7		91.59
21	948	62.31	99.6		93.45
22	1,066	261.91	372.4		94.57
23	1,815	38.33	32.0		99.80
24	2,160	9.72	6.8		101.66
25	2,325	13.98	9.1		102.25

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...

... Peak table for sample 1 : YL_GF_06_1:20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,671	11.52	6.5		103.47
27	3,232	3.64	1.7		104.93
28	3,869	4.12	1.6		105.77
29	10,380	75.00	10.9	Upper Marker	113.00
30	12,317	0.00	0.0		114.81

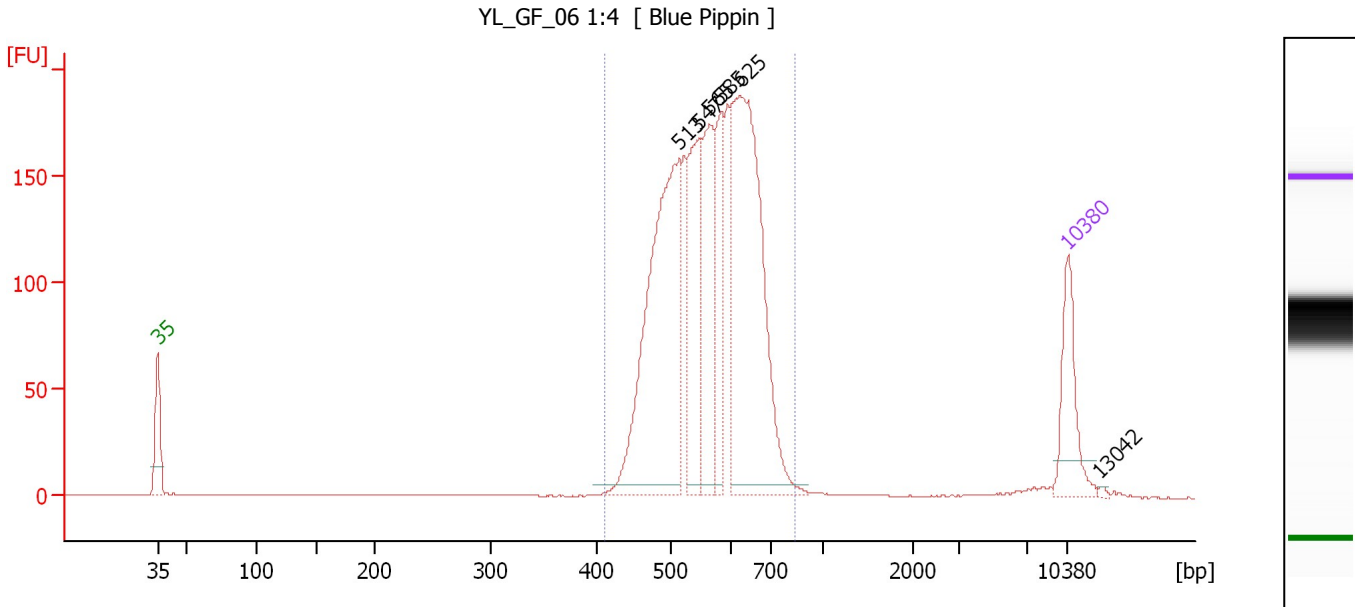
Region table for sample 1 : YL_GF_06_1:20

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
311	761	2,479	2,256.3	5,844.1	89	55.9	2,173.89

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : YL_GF_06_1:4

Number of peaks found: 6 Corr. Area 1: 1,954.8
 Noise: 0.2

Peak table for sample 2 : YL_GF_06_1:4

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	513	463.48	1,369.2		83.12
3	547	168.67	467.1		84.66
4	565	163.34	438.1		85.46
5	585	114.79	297.4		86.35
6	625	473.43	1,147.4		87.84
7	10,380	75.00	10.9	Upper Marker	113.00
8	13,042	0.00	0.0		115.49

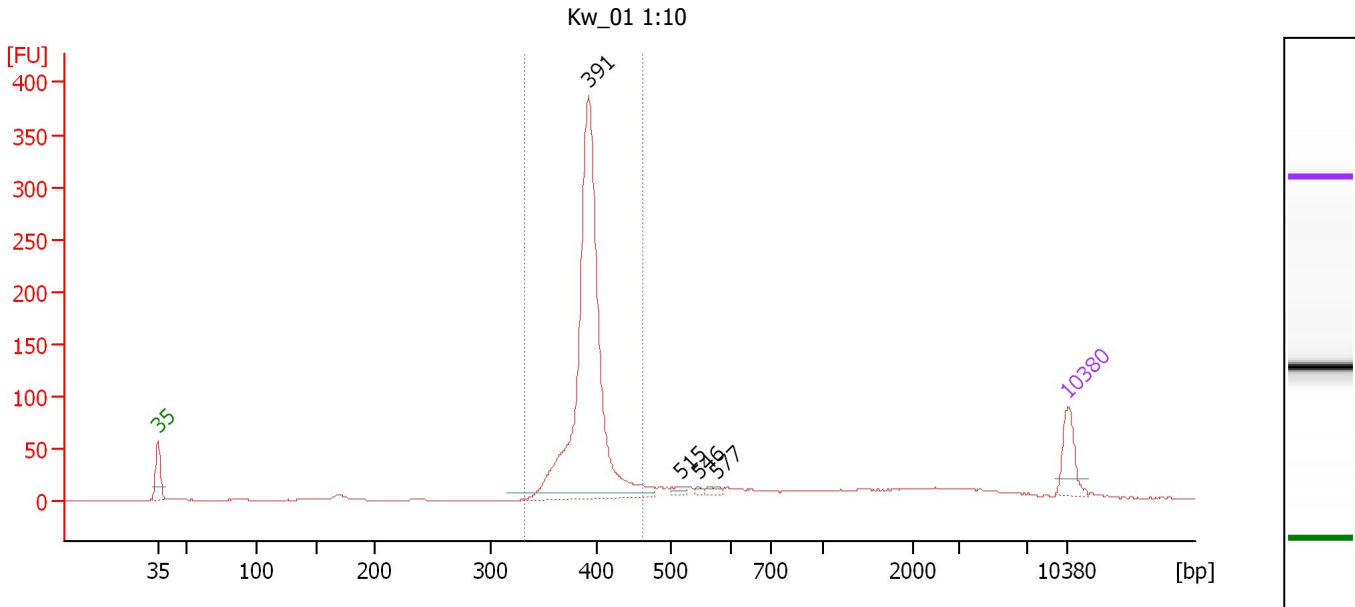
Region table for sample 2 : YL_GF_06_1:4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
409	568	843	1,954.8	4,360.6	95	12.5	1,601.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Kw_01 1:10

Number of peaks found: 4 Corr. Area 1: 966.8
 Noise: 0.1

Peak table for sample 3 : Kw_01 1:10

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	391	1,273.23	4,930.3		76.14
3	515	15.35	45.1		83.23
4	546	6.86	19.0		84.59
5	577	12.11	31.8		86.00
6	10,380	75.00	10.9	Upper Marker	113.00

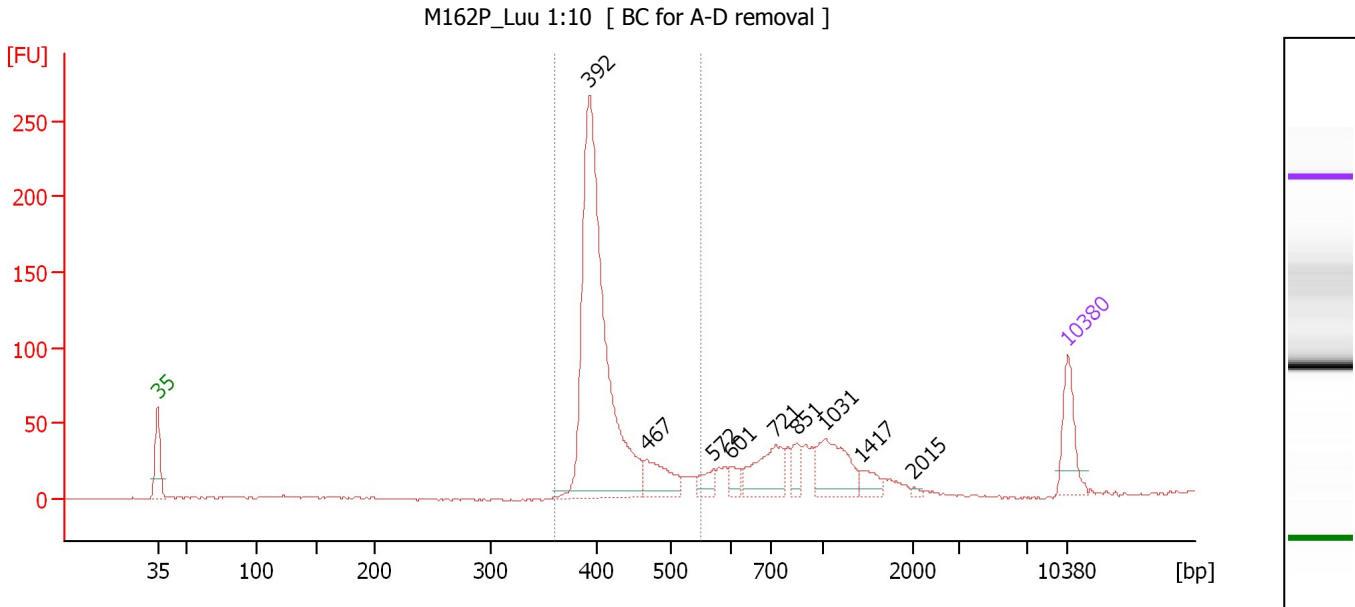
Region table for sample 3 : Kw_01 1:10

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
332	392	460	966.8	5,001.7	70	4.5	1,290.64

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : M162P_Luu 1:10

Number of peaks found: 9 Corr. Area 1: 809.6
 Noise: 0.5

Peak table for sample 4 : M162P_Luu 1:10

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	392	891.30	3,442.8		76.22
3	467	88.87	288.6		80.65
4	572	32.28	85.5		85.78
5	601	24.47	61.7		87.06
6	721	113.64	238.7		90.51
7	851	33.65	59.9		92.19
8	1,031	116.12	170.6		94.33
9	1,417	28.16	30.1		97.03
10	2,015	3.88	2.9		101.15
11	10,380	75.00	10.9	Upper Marker	113.00

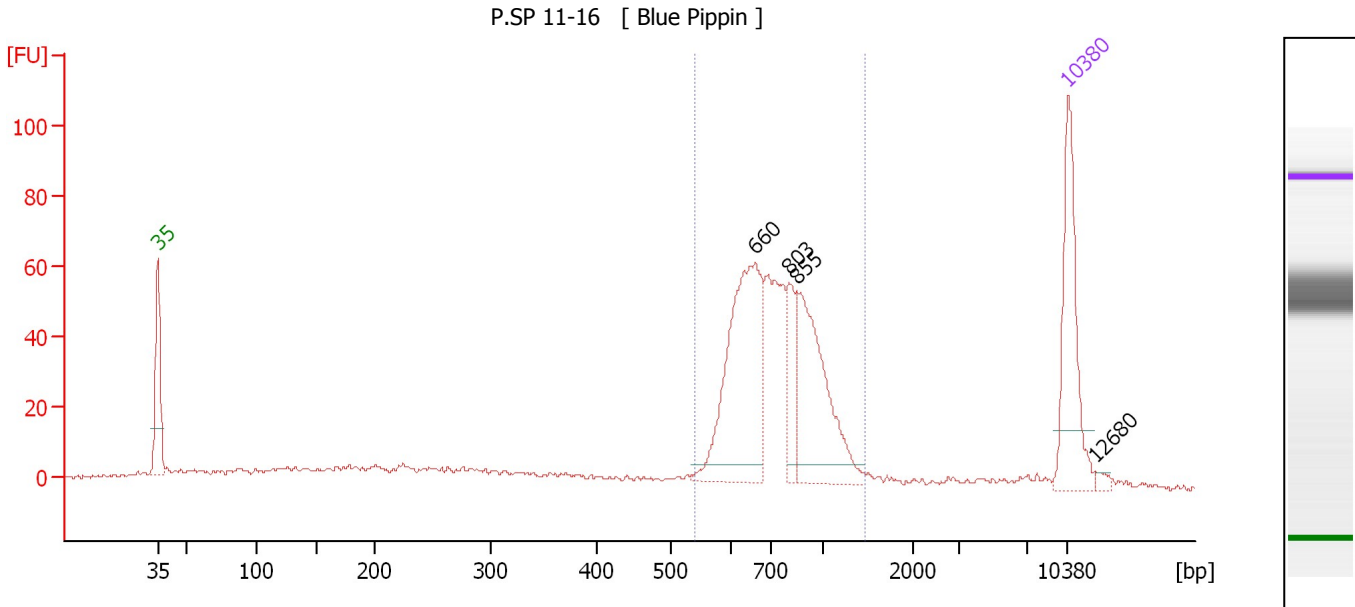
Region table for sample 4 : M162P_Luu 1:10

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
359	416	549	809.6	3,741.0	58	9.1	1,018.05

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : P.SP 11-16

Number of peaks found: 4 Corr. Area 1: 545.5
 Noise: 0.7

Peak table for sample 5 : P.SP 11-16

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	660	182.50	418.8		88.97
3	803	36.37	68.6		91.58
4	855	122.62	217.3		92.24
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,680	0.00	0.0		115.15

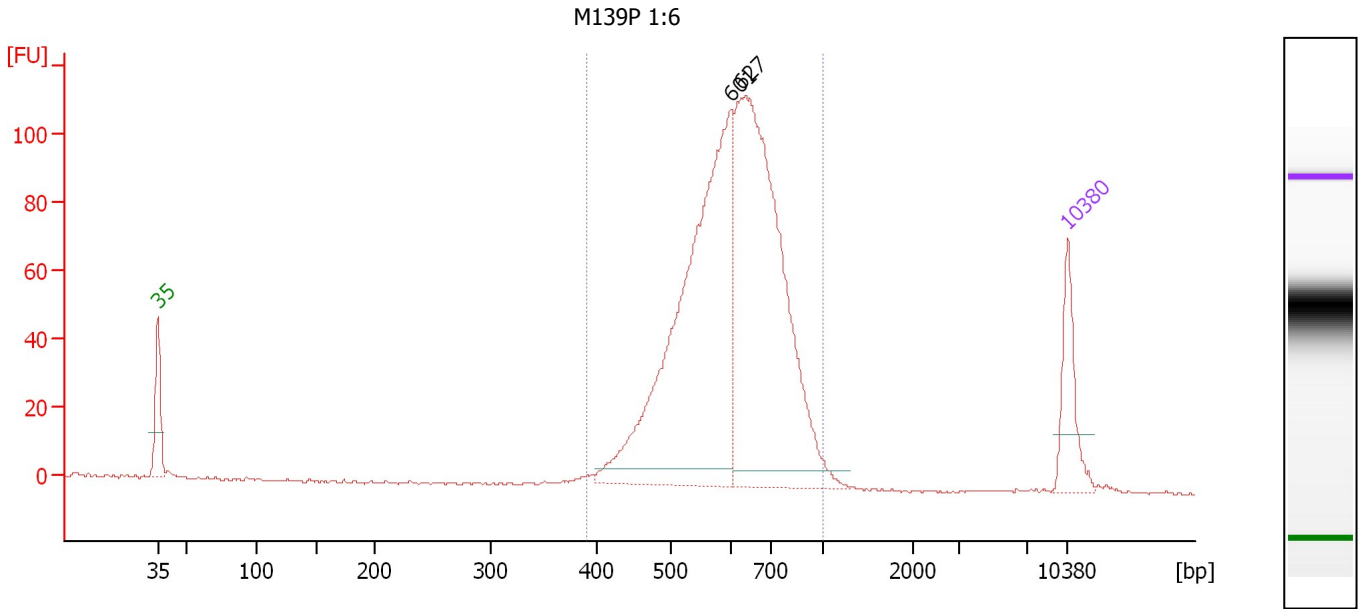
Region table for sample 5 : P.SP 11-16

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
540	777	1,475	545.5	928.7	70	22.8	453.01

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : M139P 1:6

Number of peaks found: 2 Corr. Area 1: 1,126.4
 Noise: 0.3

Peak table for sample 6 : M139P 1:6

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	601	770.64	1,941.4		87.08
3	627	769.66	1,859.6		87.90
4	10,380	75.00	10.9	Upper Marker	113.00

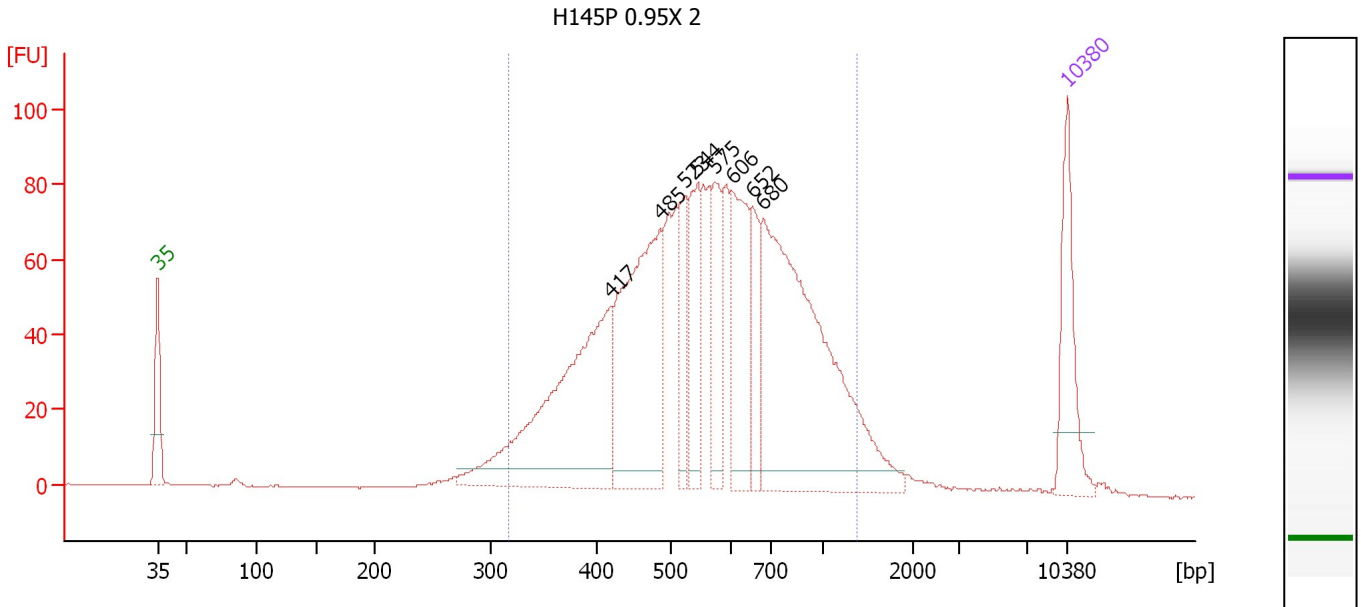
Region table for sample 6 : M139P 1:6

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
390	620	1,000	1,126.4	4,023.7	97	17.4	1,589.92

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : H145P 0.95X 2

Number of peaks found: 8 Corr. Area 1: 1,693.7
 Noise: 0.1

Peak table for sample 7 : H145P 0.95X 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	417	346.66	1,258.2		77.84
3	485	295.60	923.9		81.68
4	523	68.78	199.1		83.59
5	544	98.49	274.3		84.52
6	575	76.71	202.1		85.92
7	606	119.20	298.2		87.22
8	652	59.30	137.7		88.72
9	680	451.68	1,006.5		89.60
10	10,380	75.00	10.9	Upper Marker	113.00

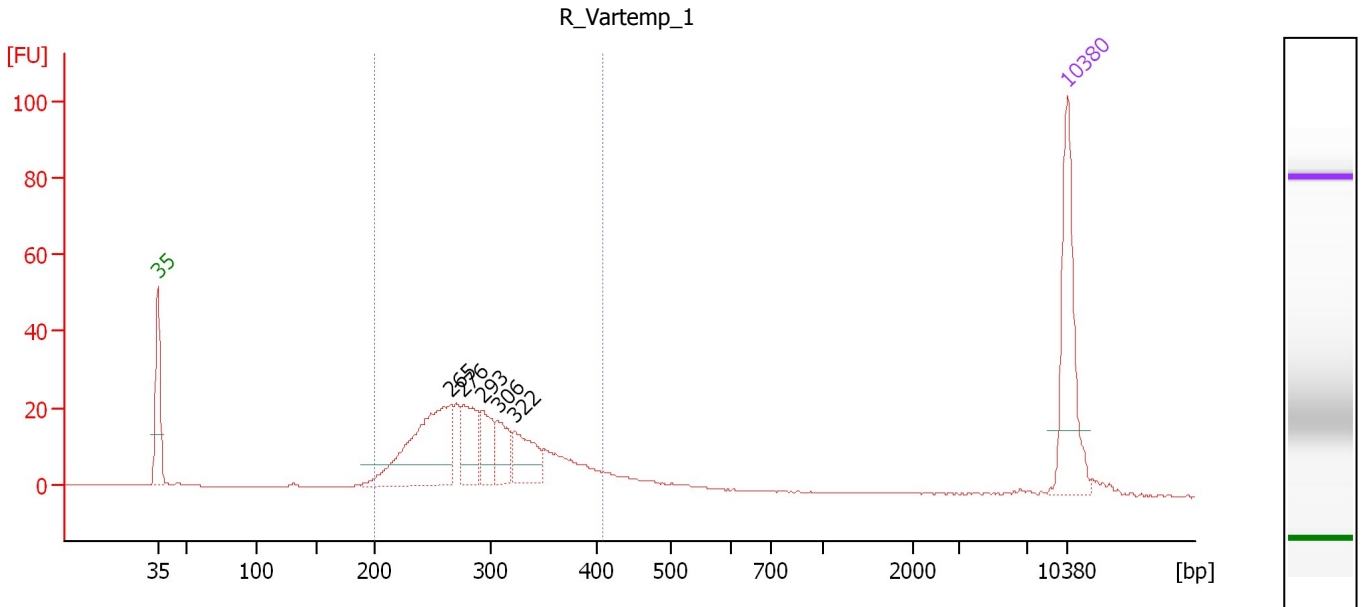
Region table for sample 7 : H145P 0.95X 2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
317	602	1,376	1,693.7	4,921.2	92	34.7	1,715.72

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : R_Vartemp_1

Number of peaks found: 5 Corr. Area 1: 347.1
 Noise: 0.2

Peak table for sample 8 : R_Vartemp_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	265	140.61	804.3		65.54
3	276	51.22	281.3		66.52
4	293	33.81	174.9		68.03
5	306	32.16	159.2		69.18
6	322	42.25	198.8		70.48
7	10,380	75.00	10.9	Upper Marker	113.00

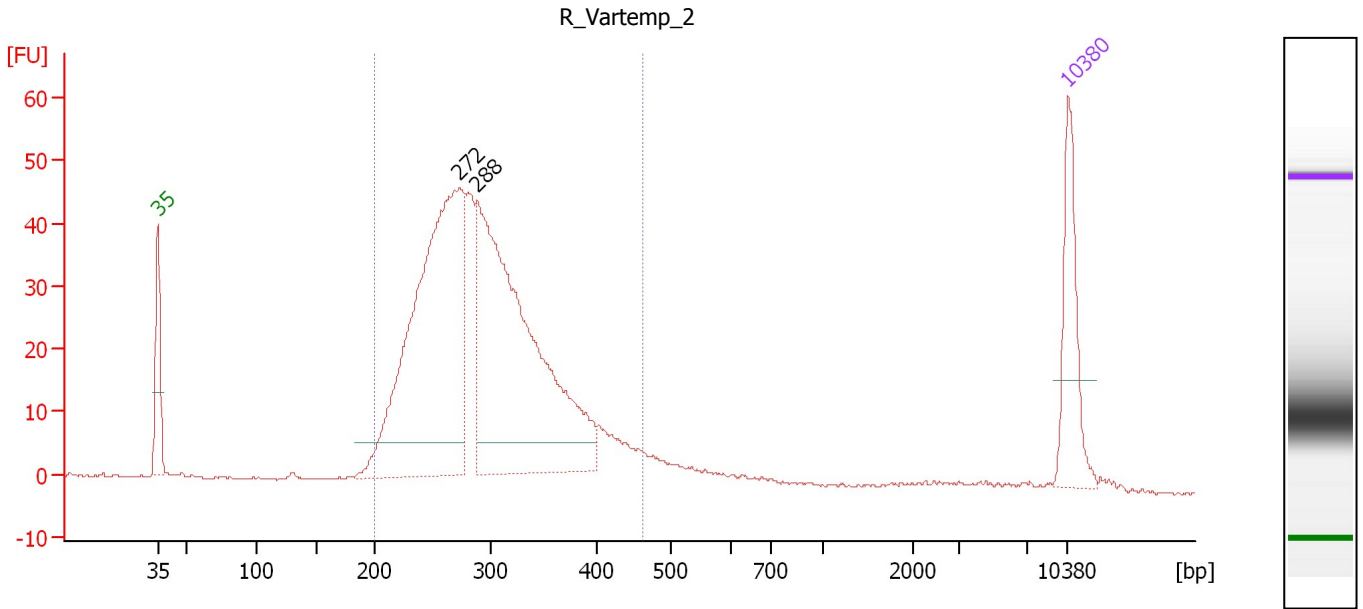
Region table for sample 8 : R_Vartemp_1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	292	407	347.1	2,229.5	85	16.3	417.02

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : R_Vartemp_2

Number of peaks found: 2 Corr. Area 1: 715.9
 Noise: 0.2

Peak table for sample 9 : R_Vartemp_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	272	576.80	3,210.3		66.19
3	288	566.56	2,979.9		67.61
4	10,380	75.00	10.9	Upper Marker	113.00

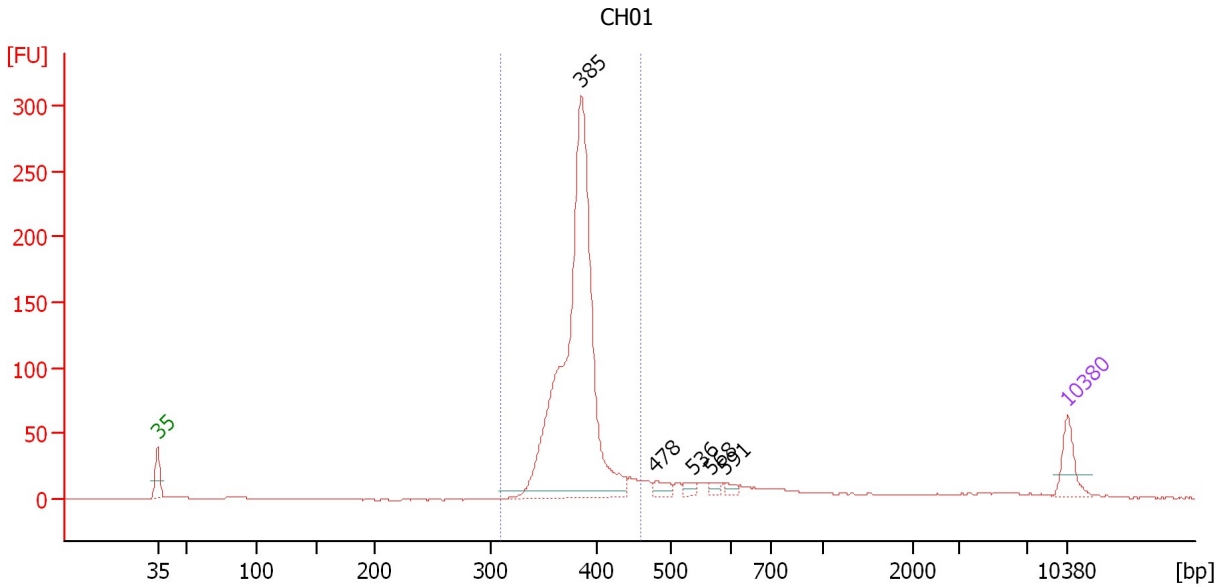
Region table for sample 9 : R_Vartemp_2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	296	462	715.9	7,142.6	92	18.1	1,346.68

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : CH01

Number of peaks found: 5 Corr. Area 1: 966.3
 Noise: 0.2

Peak table for sample 10 : CH01

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	385	1,717.34	6,761.8		75.61
3	478	36.25	114.9		81.28
4	536	22.18	62.7		84.17
5	568	19.10	51.0		85.59
6	591	17.99	46.1		86.64
7	10,380	75.00	10.9	Upper Marker	113.00

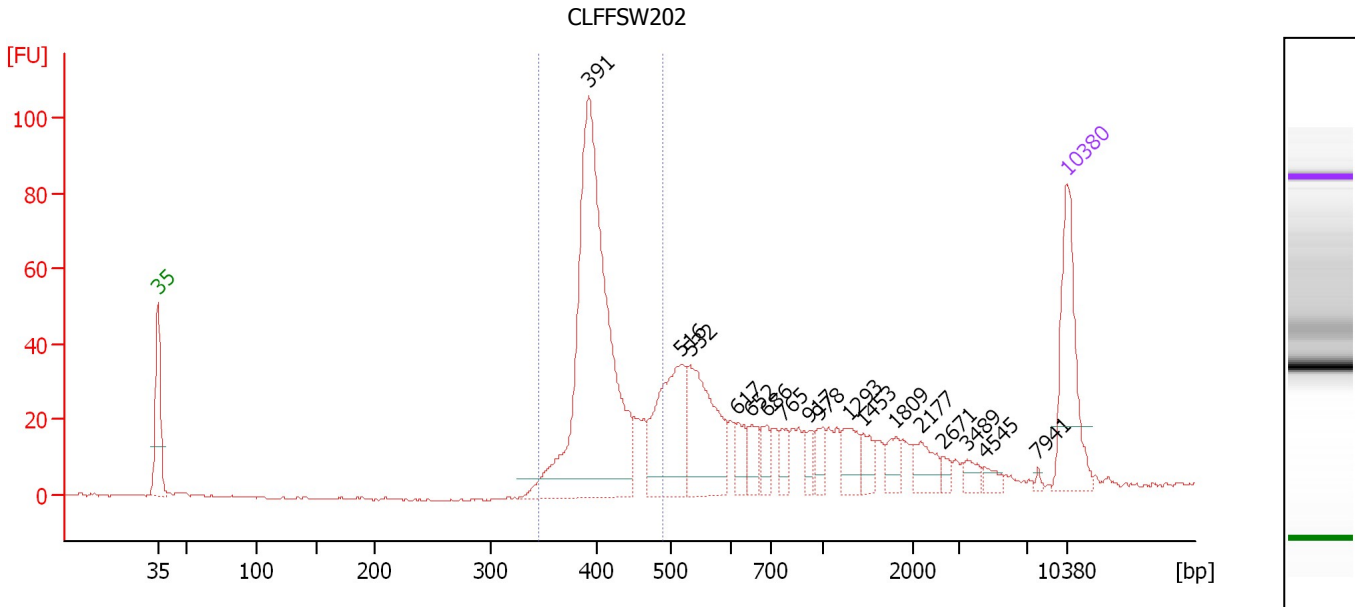
Region table for sample 10 : CH01

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
309	381	458	966.3	7,179.1	77	5.4	1,802.03

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
 Modified: 7/23/2015 9:44:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : CLFFSW202

Number of peaks found: 17 Corr. Area 1: 410.8
 Noise: 0.3

Peak table for sample 11 : CLFFSW202

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	425.41	1,646.9		76.15
3	516	114.41	336.2		83.24
4	532	109.25	311.1		83.98
5	617	19.55	48.0		87.58
6	652	19.17	44.6		88.70
7	686	15.67	34.6		89.81
8	765	14.47	28.7		91.08
9	917	11.99	19.8		93.04
10	978	13.79	21.4		93.83
11	1,293	22.47	26.3		96.16
12	1,453	13.78	14.4		97.27
13	1,809	13.48	11.3		99.76
14	2,177	20.57	14.3		101.72
15	2,671	5.70	3.2		103.47
16	3,489	9.17	4.0		105.27
17	4,545	7.03	2.3		106.65
18	7,941	1.96	0.4		110.72
19	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : CLFFSW202

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
345	408	487	410.8	1,740.8	45	7.5	466.86

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-23\2015-07-23_001.xad

Created: 7/23/2015 8:32:12 AM
Modified: 7/23/2015 9:44:01 AM

Gel Image

