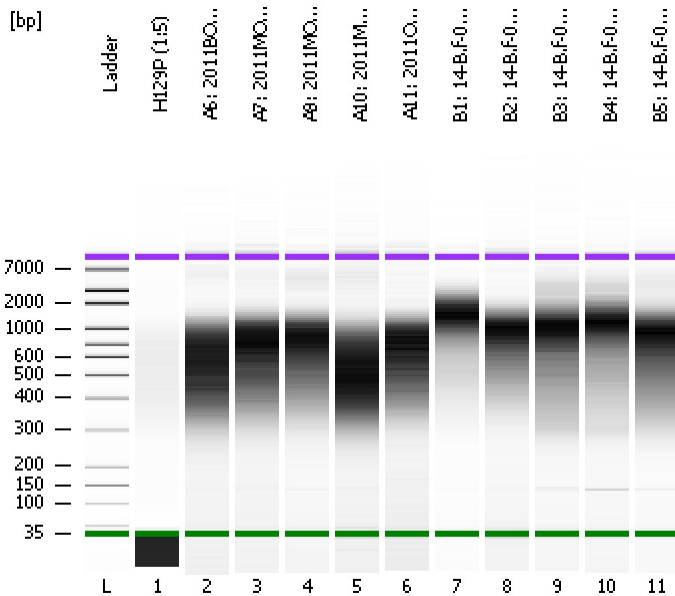


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
Modified: 6/18/2015 12:18:11 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

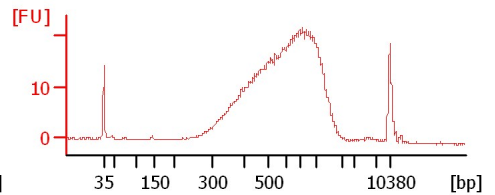
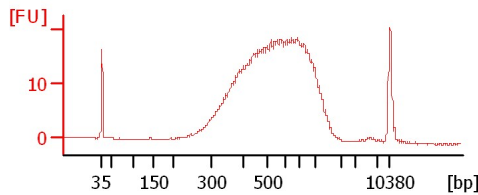
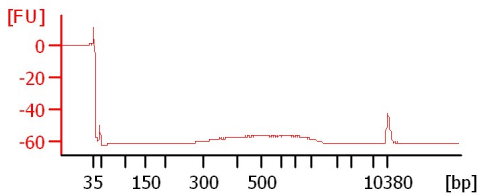
Chip Information:

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

H129P (1:5)

A6: 2011BOE048 (1:11)

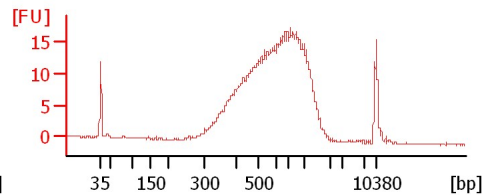
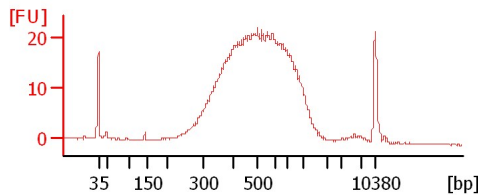
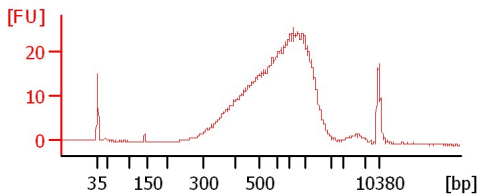
A7: 2011MOY057 (1:5)



A9: 2011MOY073 (1:6)

A10: 2011MUT039 (1:9)

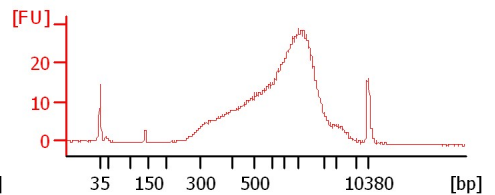
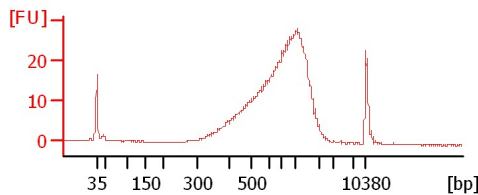
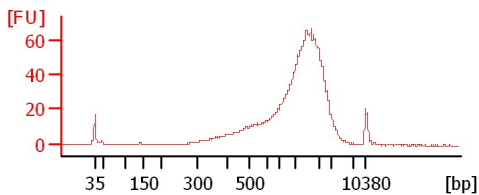
A11: 2011OSS012 (1:5)



B1: 14-B.f-007 (1:2)

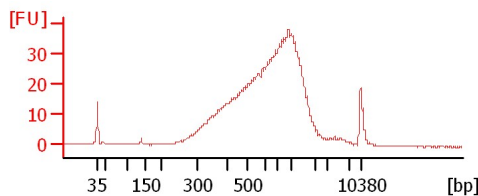
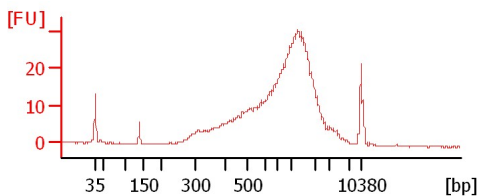
B2: 14-B.f-006 (1:2)

B3: 14-B.f-008 (1:3)



B4: 14-B.f-009 (1:3)

B5: 14-B.f-012 (1:5)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
Modified: 6/18/2015 12:18:11 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
H129P (1:5)		<input type="checkbox"/>	✓			
A6: 2011BOE048 (1:11)		<input type="checkbox"/>	✓			
A7: 2011MOY057 (1:5)		<input type="checkbox"/>	✓			
A9: 2011MOY073 (1:6)		<input type="checkbox"/>	✓			
A10: 2011MUT039 (1:9)		<input type="checkbox"/>	✓			
A11: 2011OSS012 (1:5)		<input type="checkbox"/>	✓			
B1: 14-B.f-007 (1:2)		<input type="checkbox"/>	✓			
B2: 14-B.f-006 (1:2)		<input type="checkbox"/>	✓			
B3: 14-B.f-008 (1:3)		<input type="checkbox"/>	✓			
B4: 14-B.f-009 (1:3)		<input type="checkbox"/>	✓			
B5: 14-B.f-012 (1:5)		<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\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
Modified: 6/18/2015 12:18:11 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

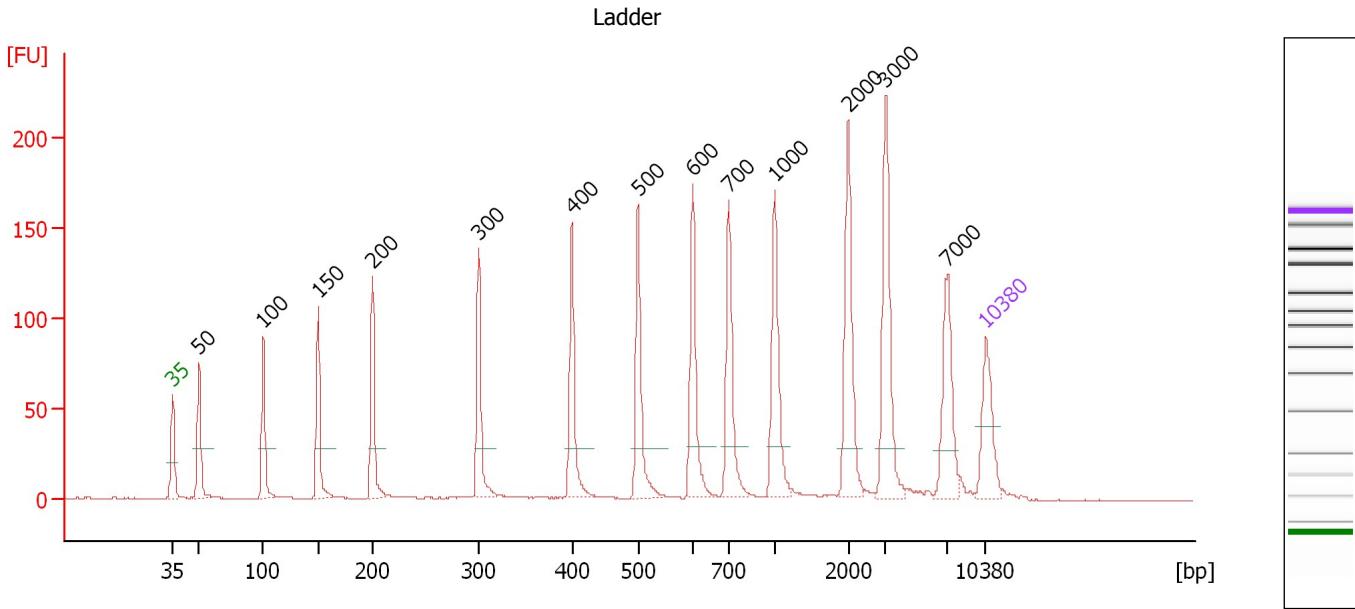
Ladder

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\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

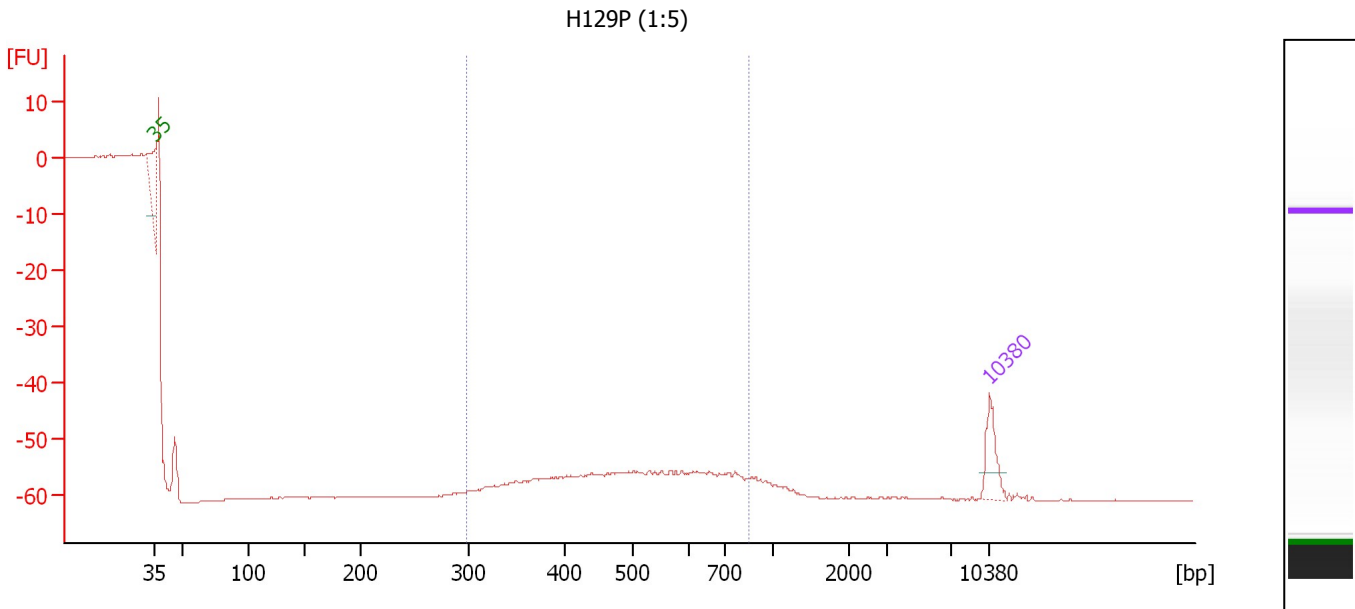
Peak table for Ladder

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	45.30
3	100	150.00	2,272.7	Ladder Peak	50.80
4	150	150.00	1,515.2	Ladder Peak	55.53
5	200	150.00	1,136.4	Ladder Peak	60.21
6	300	150.00	757.6	Ladder Peak	69.35
7	400	150.00	568.2	Ladder Peak	77.38
8	500	150.00	454.5	Ladder Peak	83.07
9	600	150.00	378.8	Ladder Peak	87.75
10	700	150.00	324.7	Ladder Peak	90.88
11	1,000	150.00	227.3	Ladder Peak	94.82
12	2,000	150.00	113.6	Ladder Peak	101.16
13	3,000	150.00	75.8	Ladder Peak	104.37
14	7,000	150.00	32.5	Ladder Peak	109.74
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
 Modified: 6/18/2015 12:18:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : H129P (1:5)

Number of peaks found: 0 Corr. Area 1: 0.0
 Noise: 0.1

Peak table for sample 1 : H129P (1:5)

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

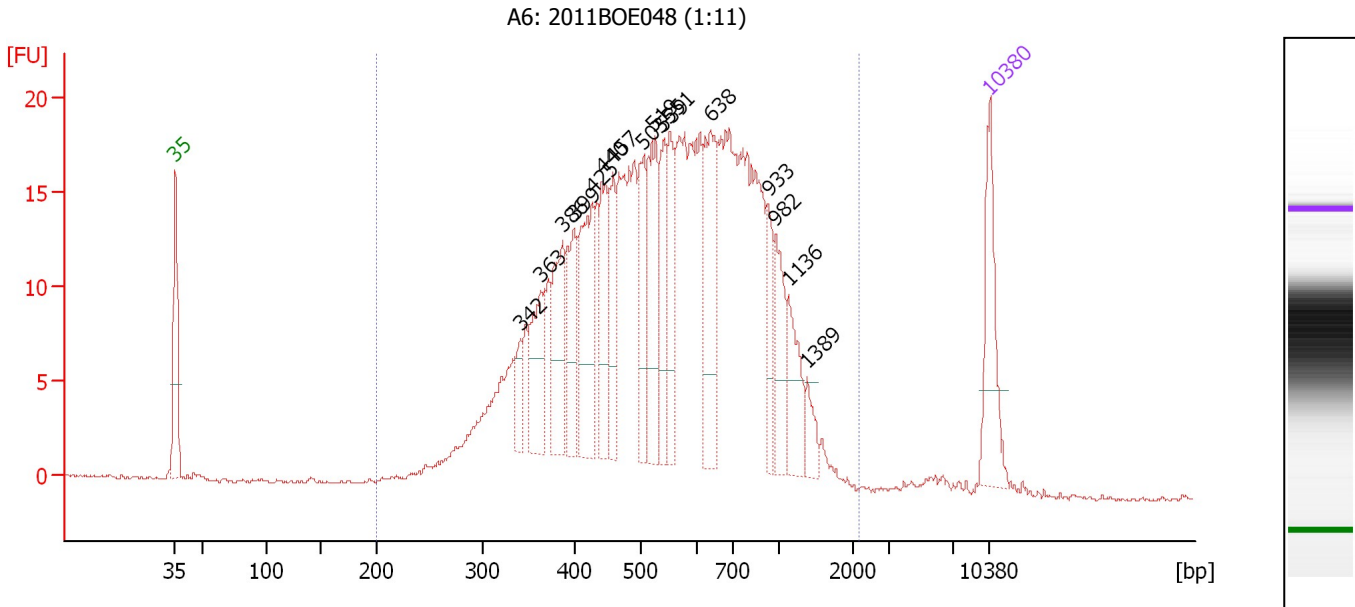
Region table for sample 1 : H129P (1:5)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
298	0	847	0.0	0.0	0	0.0	0.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

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 Modified: 6/18/2015 12:18:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : A6: 2011BOE048 (1:11)

Number of peaks found: 16 Corr. Area 1: 503.9
 Noise: 0.1

Peak table for sample 2 : A6: 2011BOE048 (1:11)

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	342	29.40	130.4		72.69
3	363	84.10	351.3		74.38
4	386	99.89	392.0		76.26
5	399	82.21	312.5		77.27
6	425	132.18	470.8		78.82
7	440	84.26	290.2		79.65
8	457	65.08	215.9		80.61
9	503	78.47	236.3		83.22
10	519	126.25	368.7		83.96
11	539	73.26	205.8		84.92
12	551	73.65	202.5		85.47
13	638	135.06	320.6		88.95
14	933	44.10	71.6		93.94
15	982	63.21	97.5		94.58
16	1,136	56.84	75.8		95.68
17	1,389	21.82	23.8		97.29
18	10,380	75.00	10.9	Upper Marker	113.00

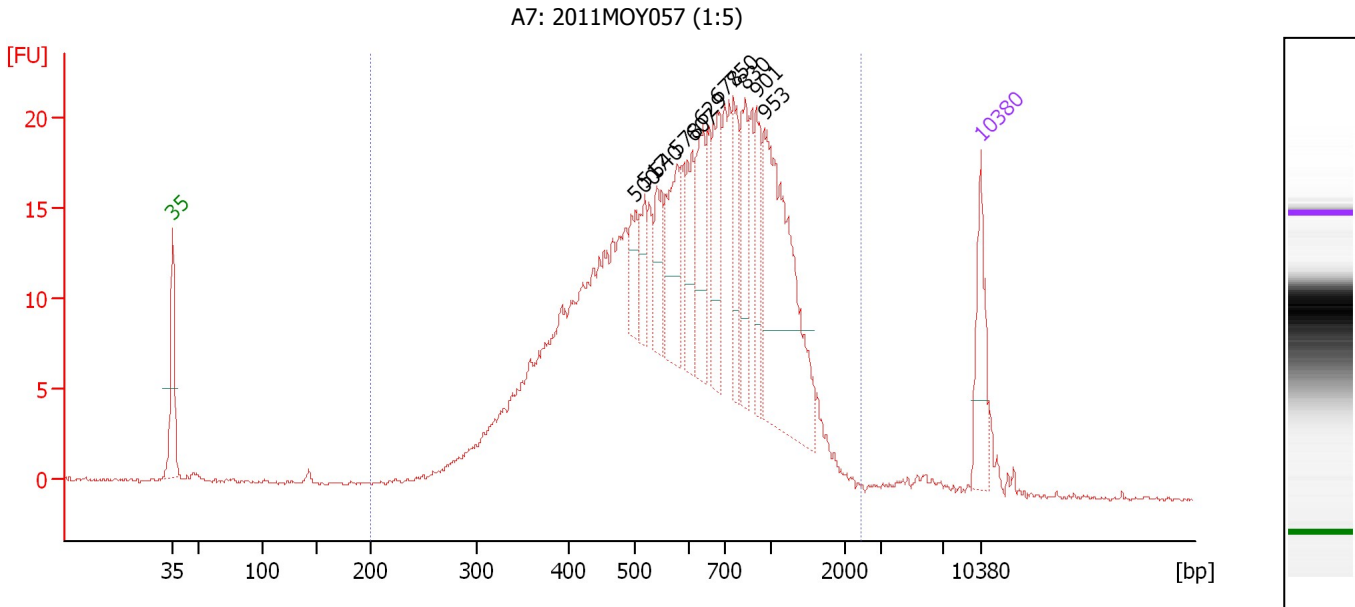
Region table for sample 2 : A6: 2011BOE048 (1:11)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	603	2,196	503.9	8,543.5	99	42.6	2,803.17

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
 Modified: 6/18/2015 12:18:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : A7: 2011MOY057 (1:5)

Number of peaks found: 11 Corr. Area 1: 493.0
 Noise: 0.1

Peak table for sample 3 : A7: 2011MOY057 (1:5)

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	500	50.03	151.6		83.08
3	517	49.16	144.1		83.86
4	540	55.01	154.5		84.93
5	578	112.73	295.5		86.73
6	607	71.90	179.5		87.97
7	629	96.52	232.4		88.67
8	678	103.67	231.7		90.19
9	750	80.49	162.7		91.53
10	830	94.42	172.3		92.59
11	901	74.09	124.6		93.51
12	953	330.98	526.1		94.21
13	10,380	75.00	10.9	Upper Marker	113.00

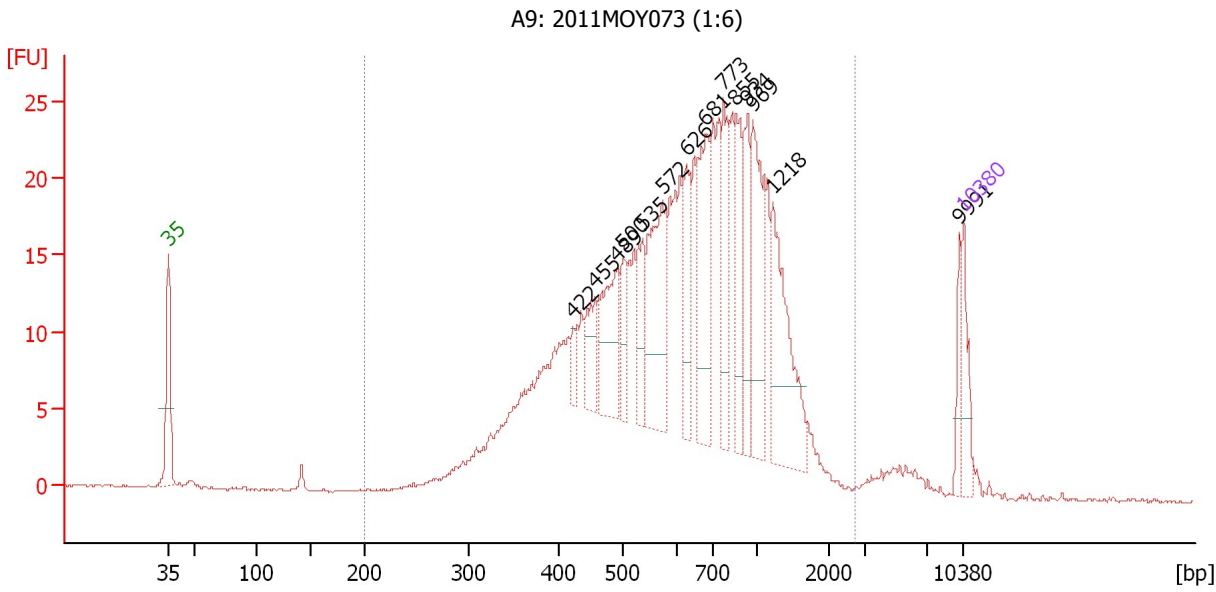
Region table for sample 3 : A7: 2011MOY057 (1:5)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	688	2,466	493.0	9,428.1	97	46.5	3,391.42

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
 Modified: 6/18/2015 12:18:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : A9: 2011MOY073 (1:6)

Number of peaks found: 14 Corr. Area 1: 514.3
 Noise: 0.1

Peak table for sample 4 : A9: 2011MOY073 (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	422	43.03	154.6		78.61
3	455	110.00	366.0		80.53
4	489	204.91	634.7		82.46
5	500	83.81	254.0		83.07
6	535	117.55	332.9		84.71
7	572	286.23	758.1		86.45
8	626	130.94	317.1		88.56
9	681	243.09	540.6		90.29
10	773	179.31	351.3		91.84
11	855	160.86	284.9		92.92
12	934	132.22	214.5		93.95
13	969	231.95	362.5		94.42
14	1,218	283.70	352.9		96.20
15	9,991	47.29	7.2		112.62
16	10,380	75.00	10.9	Upper Marker	113.00

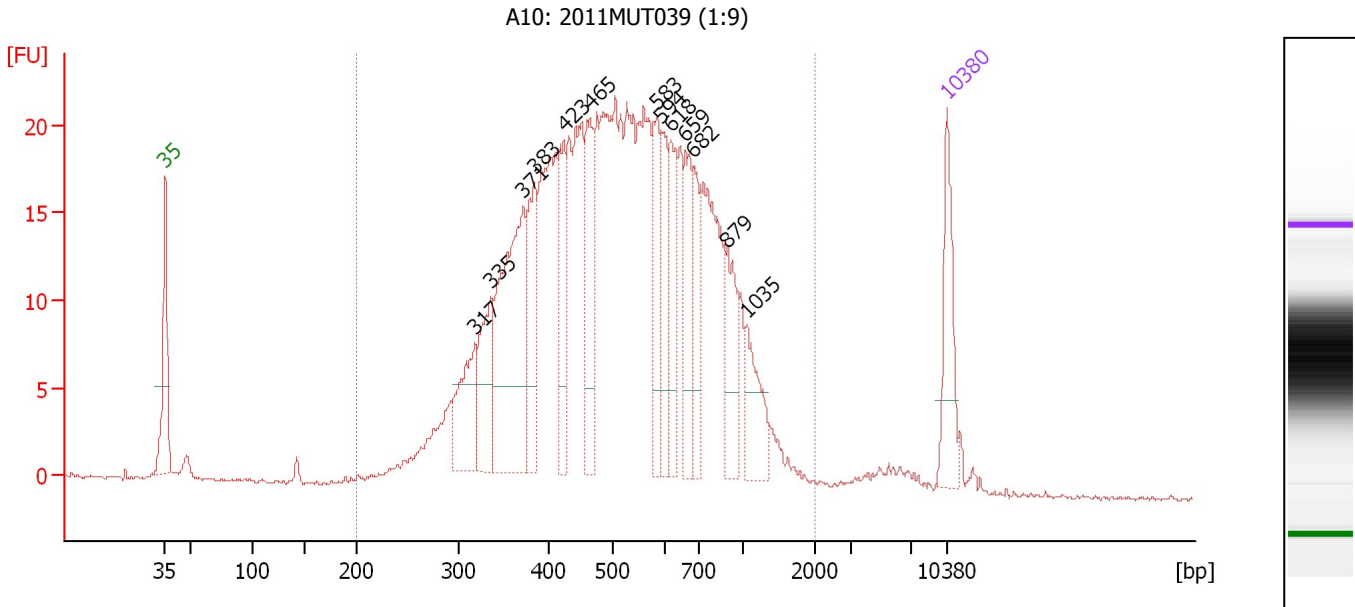
Region table for sample 4 : A9: 2011MOY073 (1:6)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	720	2,719	514.3	13,630.0	96	46.3	5,139.99

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
 Modified: 6/18/2015 12:18:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : A10: 2011MUT039 (1:9)

Number of peaks found: 13 Corr. Area 1: 589.5
 Noise: 0.1

Peak table for sample 5 : A10: 2011MUT039 (1:9)

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	317	110.16	525.9		70.74
3	335	113.32	512.2		72.17
4	371	302.19	1,232.6		75.09
5	383	120.19	475.0		76.04
6	423	93.90	336.0		78.72
7	465	118.66	386.3		81.10
8	583	84.58	219.7		86.98
9	594	74.56	190.3		87.45
10	618	88.36	216.7		88.31
11	659	90.61	208.2		89.60
12	682	76.26	169.4		90.32
13	879	76.46	131.8		93.23
14	1,035	68.00	99.5		95.05
15	10,380	75.00	10.9	Upper Marker	113.00

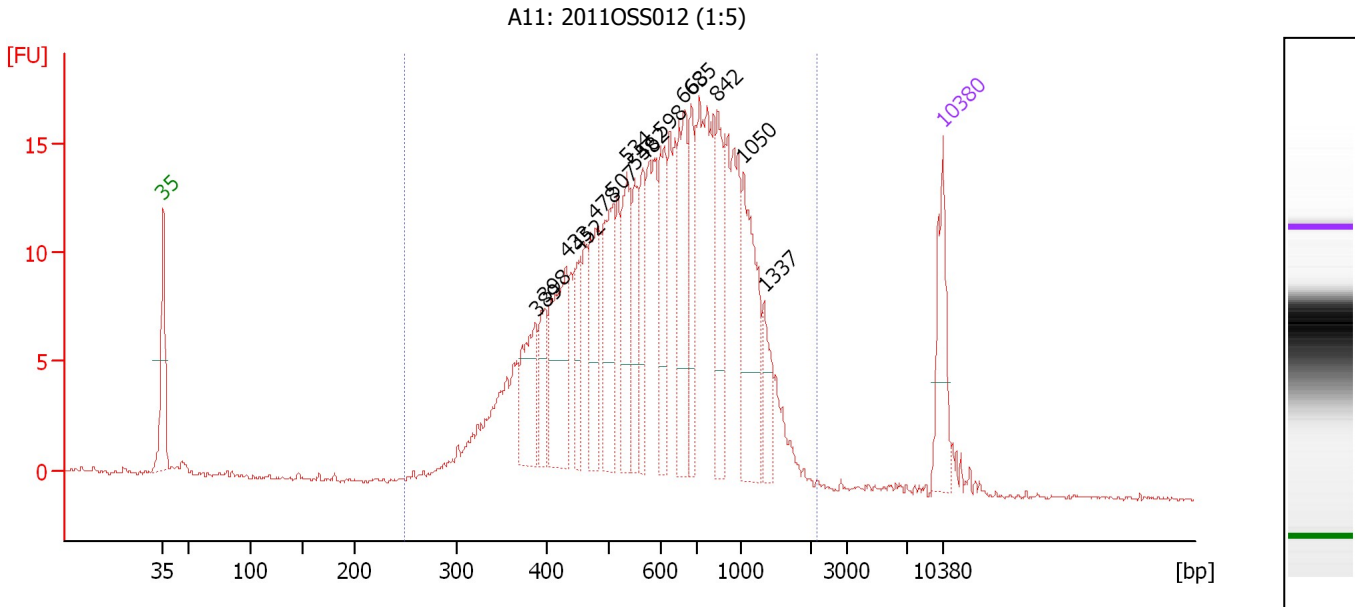
Region table for sample 5 : A10: 2011MUT039 (1:9)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	557	1,991	589.5	10,672.7	97	41.5	3,294.52

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

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 Modified: 6/18/2015 12:18:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : A11: 2011OSS012 (1:5)

Number of peaks found: 15 Corr. Area 1: 374.2
 Noise: 0.1

Peak table for sample 6 : A11: 2011OSS012 (1:5)

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	389	105.16	410.0		76.47
3	398	59.40	226.0		77.23
4	433	168.08	588.5		79.24
5	452	62.05	208.0		80.35
6	478	112.37	356.1		81.83
7	507	136.44	407.6		83.41
8	534	113.52	322.2		84.66
9	548	77.13	213.2		85.33
10	562	78.46	211.4		86.00
11	598	104.85	265.5		87.67
12	663	149.11	340.6		89.73
13	685	96.77	214.1		90.40
14	842	113.06	203.4		92.75
15	1,050	151.08	218.0		95.14
16	1,337	46.31	52.5		96.96
17	10,380	75.00	10.9	Upper Marker	113.00

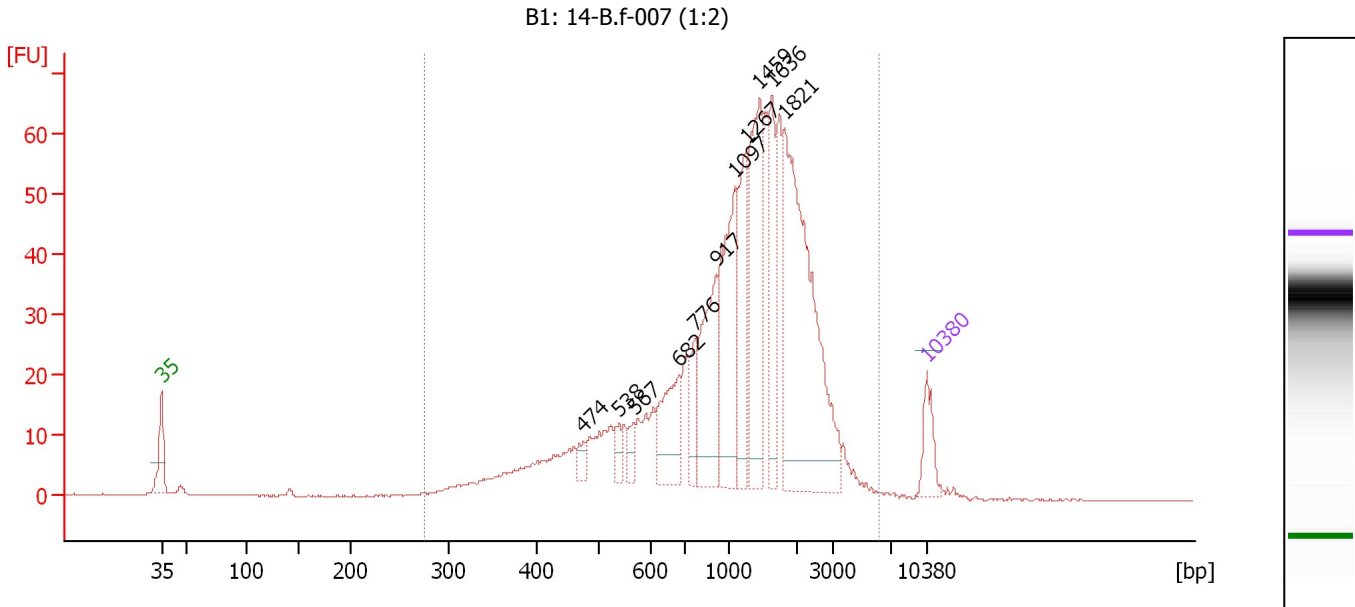
Region table for sample 6 : A11: 2011OSS012 (1:5)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
249	677	2,202	374.2	7,821.4	98	42.7	2,878.87

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
 Modified: 6/18/2015 12:18:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : B1: 14-B.f-007 (1:2)

Number of peaks found: 11 Corr. Area 1: 880.8
 Noise: 0.1

Peak table for sample 7 : B1: 14-B.f-007 (1:2)

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	474	35.24	112.7		81.59
3	538	38.08	107.2		84.85
4	567	46.88	125.2		86.22
5	682	205.30	456.0		90.32
6	776	104.54	204.1		91.88
7	917	295.62	488.4		93.73
8	1,097	376.07	519.3		95.44
9	1,267	224.83	268.9		96.51
10	1,459	401.51	416.9		97.73
11	1,636	192.22	178.0		98.85
12	1,821	797.24	663.3		100.02
13	10,380	75.00	10.9	Upper Marker	113.00

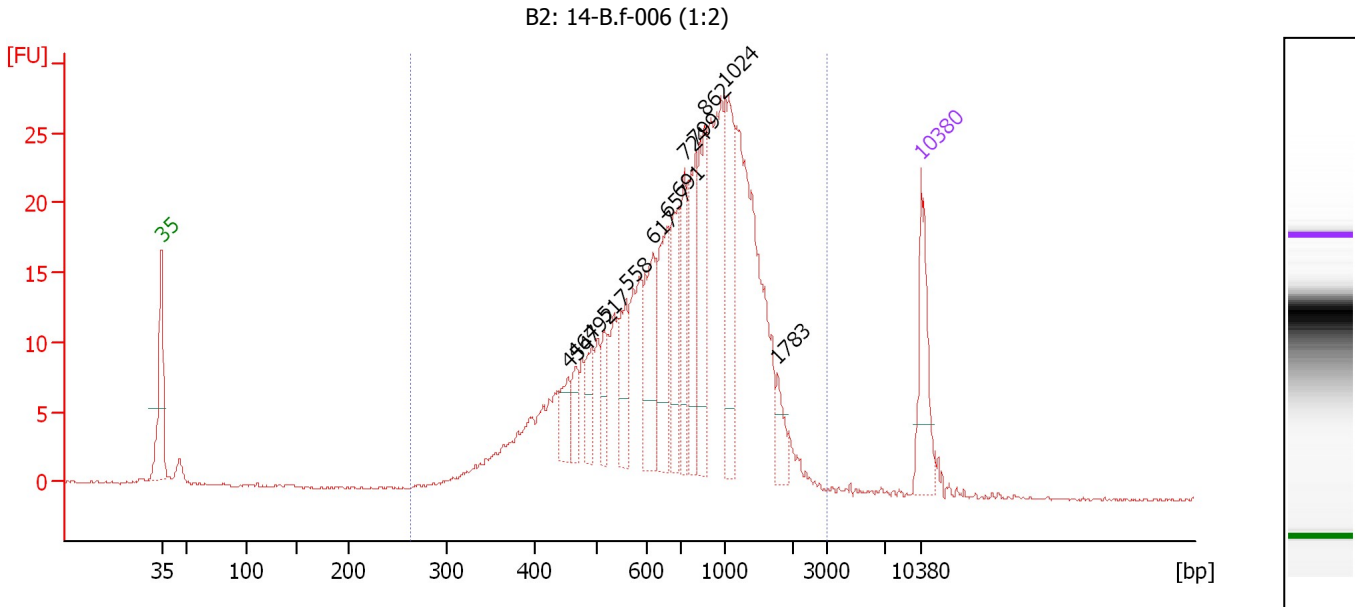
Region table for sample 7 : B1: 14-B.f-007 (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
274	1,369	6,208	880.8	7,050.7	99	56.3	4,168.06

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 8 : B2: 14-B.f-006 (1:2)

Number of peaks found: 13 Corr. Area 1: 445.5
 Noise: 0.1

Peak table for sample 8 : B2: 14-B.f-006 (1:2)

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	454	43.30	144.4		80.48
3	467	31.28	101.6		81.17
4	492	40.28	123.9		82.64
5	517	39.54	115.9		83.87
6	558	69.32	188.2		85.79
7	617	105.41	258.8		88.29
8	657	110.58	255.2		89.52
9	691	91.64	200.9		90.60
10	724	82.91	173.5		91.19
11	799	102.50	194.5		92.17
12	862	114.45	201.2		93.01
13	1,024	116.56	172.5		94.97
14	1,783	28.72	24.4		99.79
15	10,380	75.00	10.9	Upper Marker	113.00

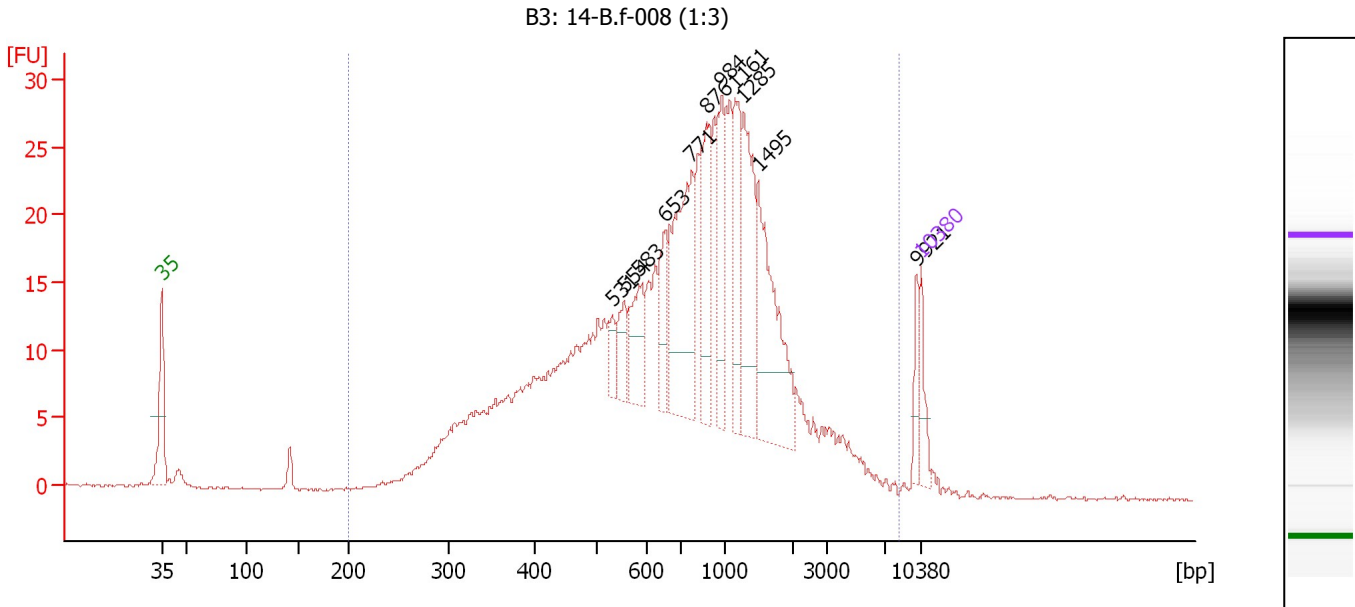
Region table for sample 8 : B2: 14-B.f-006 (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
263	860	2,972	445.5	5,005.0	98	46.5	2,219.06

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

Created: 6/18/2015 11:37:43 AM
 Modified: 6/18/2015 12:18:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : B3: 14-B.f-008 (1:3)

Number of peaks found: 11 Corr. Area 1: 582.7
 Noise: 0.1

Peak table for sample 9 : B3: 14-B.f-008 (1:3)

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	531	61.92	176.6		84.54
3	554	97.50	266.5		85.62
4	583	181.76	472.6		86.95
5	653	154.99	359.7		89.40
6	771	530.21	1,041.6		91.81
7	876	257.10	444.7		93.19
8	984	238.45	367.1		94.62
9	1,161	220.84	288.2		95.84
10	1,285	325.63	383.8		96.63
11	1,495	436.34	442.3		97.96
12	9,921	63.32	9.7		112.56
13	10,380	75.00	10.9	Upper Marker	113.00

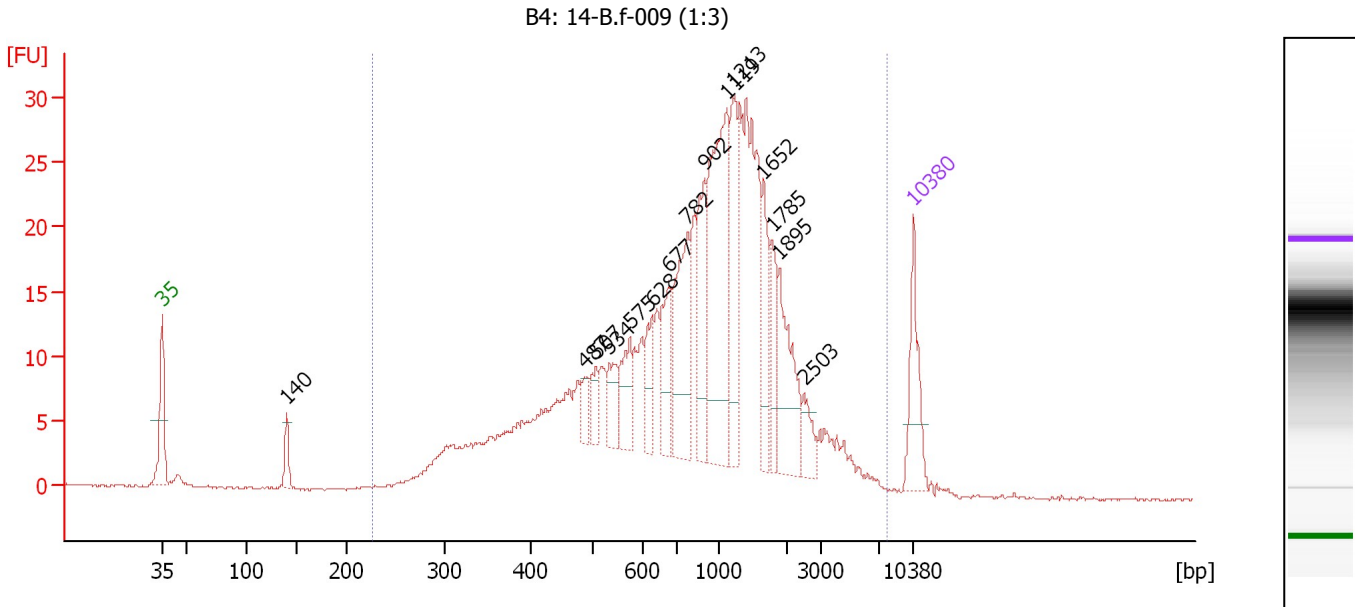
Region table for sample 9 : B3: 14-B.f-008 (1:3)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	1,009	8,266	582.7	17,356.3	97	85.1	7,069.28

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 10 : B4: 14-B.f-009 (1:3)

Number of peaks found: 15 Corr. Area 1: 517.1
 Noise: 0.1

Peak table for sample 10 : B4: 14-B.f-009 (1:3)

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	140	40.05	432.4		54.62
3	487	25.02	77.9		82.32
4	507	34.50	103.1		83.41
5	534	48.74	138.4		84.65
6	575	66.44	175.0		86.59
7	628	55.65	134.3		88.62
8	677	86.51	193.6		90.16
9	782	162.91	315.8		91.95
10	902	111.43	187.1		93.54
11	1,119	299.17	405.2		95.57
12	1,213	129.14	161.3		96.17
13	1,652	79.96	73.4		98.95
14	1,785	54.11	45.9		99.79
15	1,895	114.84	91.8		100.49
16	2,503	30.99	18.8		102.77
17	10,380	75.00	10.9	Upper Marker	113.00

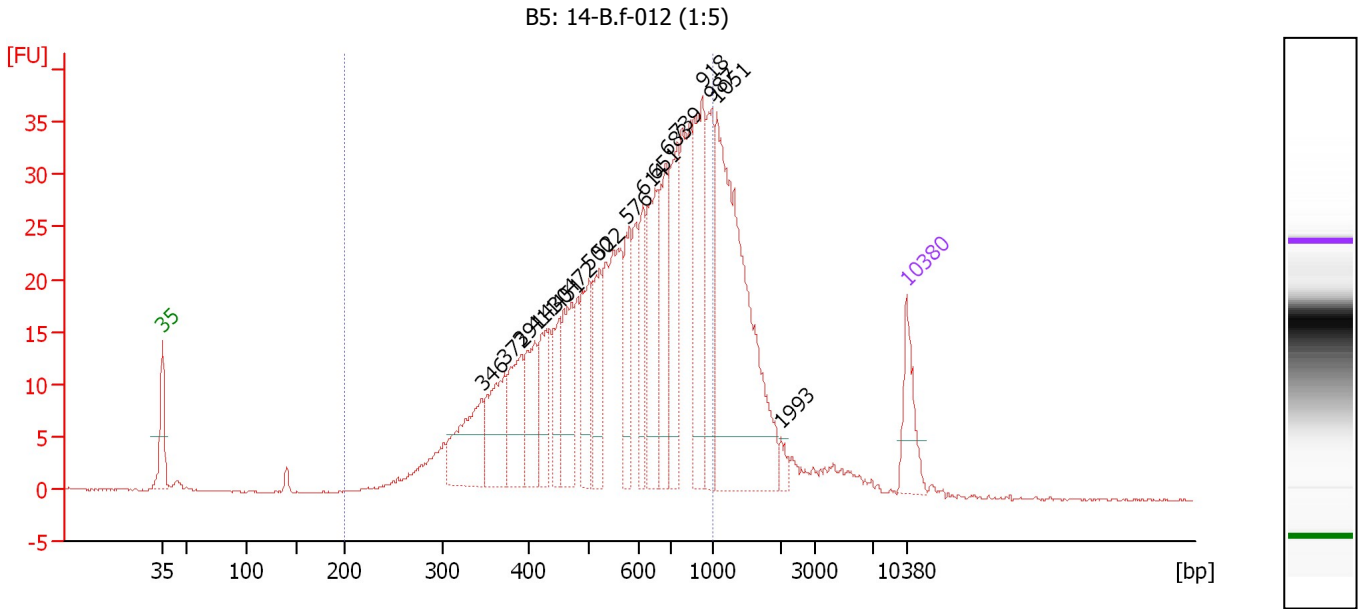
Region table for sample 10 : B4: 14-B.f-009 (1:3)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Total	Size distribution in CV [%]	Conc. [pg/μl]
226	1,139	7,818	517.1	6,394.5	98	77.5	2,910.80

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 11 : B5: 14-B.f-012 (1:5)

Number of peaks found: 18 Corr. Area 1: 616.6
 Noise: 0.1

Peak table for sample 11 : B5: 14-B.f-012 (1:5)

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	346	187.12	819.6		73.04
3	372	162.18	660.3		75.14
4	391	141.15	546.3		76.70
5	411	128.96	475.5		78.00
6	430	113.69	400.3		79.10
7	451	79.92	268.3		80.31
8	472	146.33	470.1		81.46
9	500	147.08	445.8		83.06
10	522	117.18	339.9		84.12
11	576	119.88	315.4		86.62
12	614	103.11	254.6		88.18
13	651	184.89	430.6		89.33
14	683	171.83	381.4		90.34
15	739	170.54	349.7		91.39
16	918	240.87	397.5		93.74
17	987	157.57	242.0		94.65
18	1,051	603.12	869.1		95.15
19	1,993	15.62	11.9		101.12
20	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : B5: 14-B.f-012 (1:5)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/µl]
200	597	1,000	616.6	10,064.1	79	31.4	3,412.25

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-18\2015-06-18_002.xad

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Gel Image

