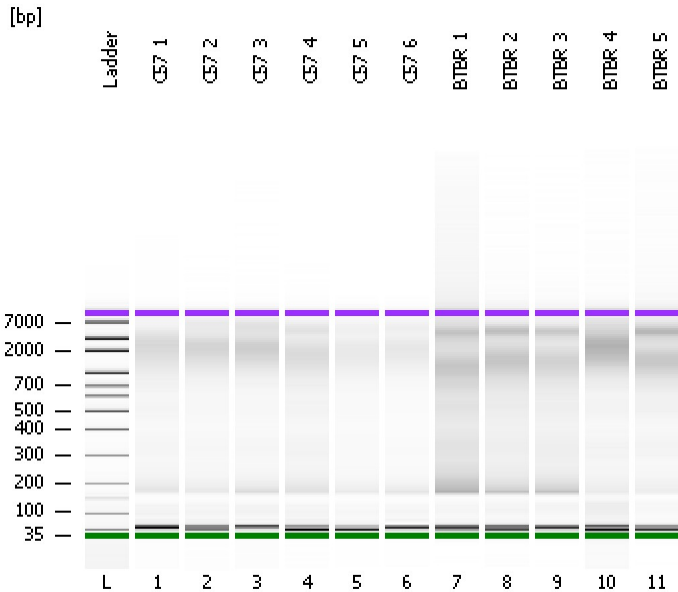


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
Modified: 6/2/2015 3:15:25 PM

Electrophoresis File Run Summary



Instrument Information:

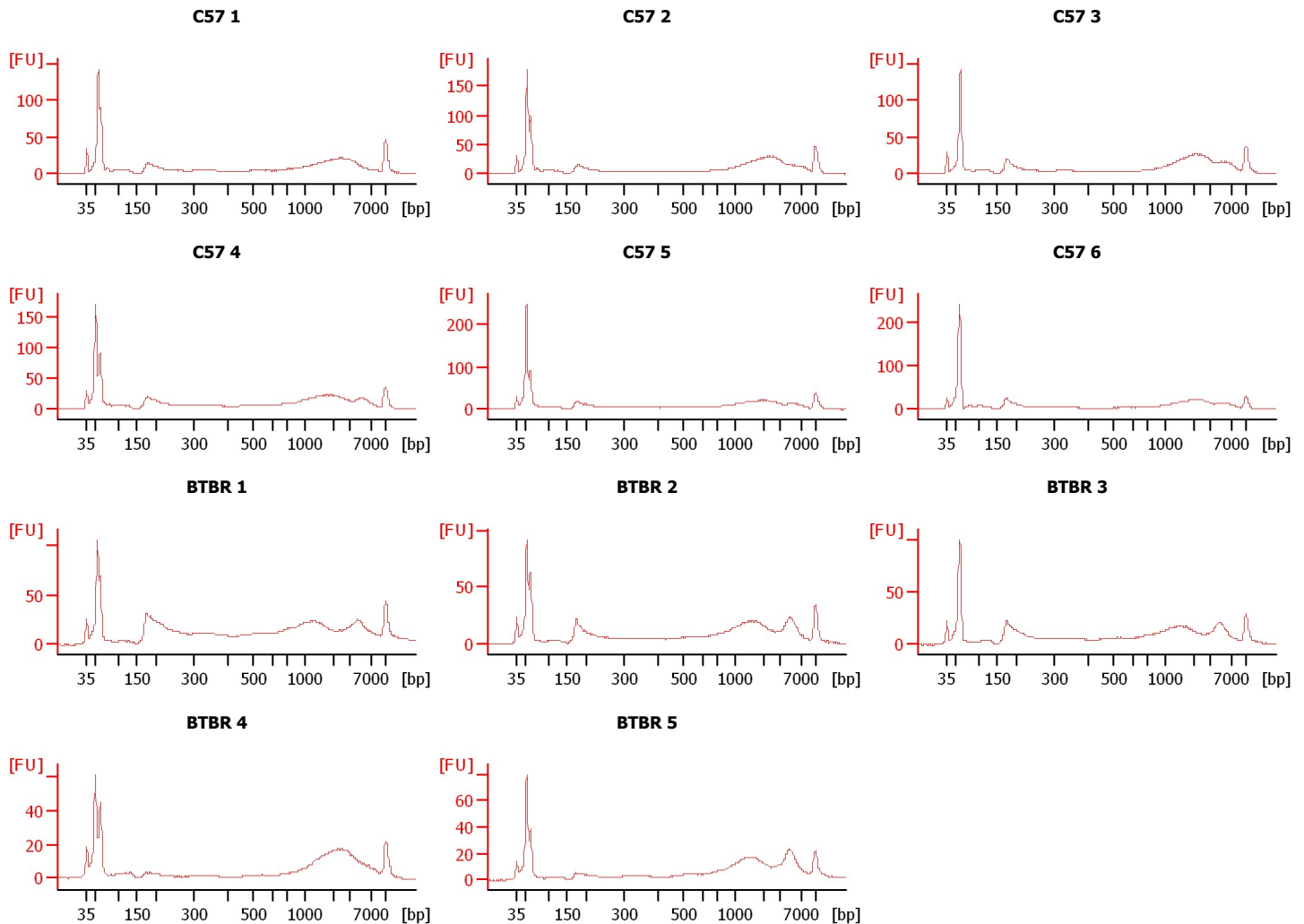
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
Modified: 6/2/2015 3:15:25 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
C57 1		<input type="checkbox"/>	✓			
C57 2		<input type="checkbox"/>	✓			
C57 3		<input type="checkbox"/>	✓			
C57 4		<input type="checkbox"/>	✓			
C57 5		<input type="checkbox"/>	✓			
C57 6		<input type="checkbox"/>	✓			
BTBR 1		<input type="checkbox"/>	✓			
BTBR 2		<input type="checkbox"/>	✓			
BTBR 3		<input type="checkbox"/>	✓			
BTBR 4		<input type="checkbox"/>	✓			
BTBR 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\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
Modified: 6/2/2015 3:15:25 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

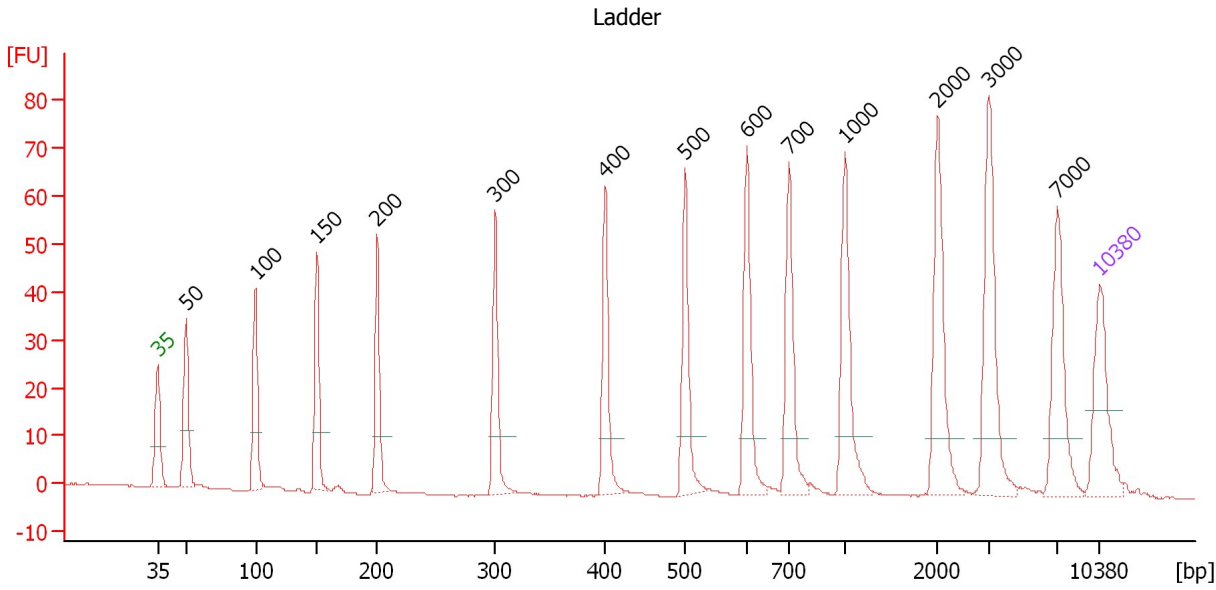
Ladder

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\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

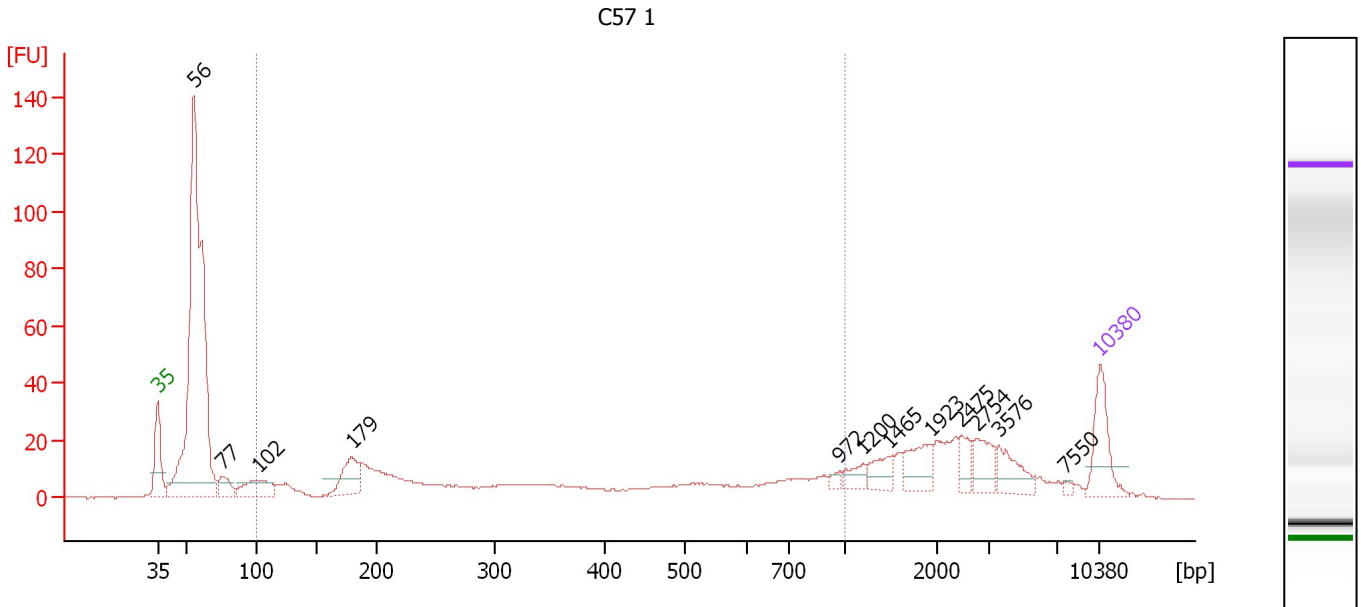
Peak table for Ladder

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	45.14
3	100	150.00	2,272.7	Ladder Peak	50.28
4	150	150.00	1,515.2	Ladder Peak	54.83
5	200	150.00	1,136.4	Ladder Peak	59.32
6	300	150.00	757.6	Ladder Peak	68.09
7	400	150.00	568.2	Ladder Peak	76.25
8	500	150.00	454.5	Ladder Peak	82.16
9	600	150.00	378.8	Ladder Peak	86.76
10	700	150.00	324.7	Ladder Peak	89.89
11	1,000	150.00	227.3	Ladder Peak	94.05
12	2,000	150.00	113.6	Ladder Peak	100.95
13	3,000	150.00	75.8	Ladder Peak	104.73
14	7,000	150.00	32.5	Ladder Peak	109.82
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : C57 1

Number of peaks found: 12 Corr. Area 1: 311.6
 Noise: 0.1

Peak table for sample 1 : C57 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	56	1,068.89	29,113.3		45.72
3	77	43.66	863.4		47.88
4	102	81.29	1,205.5		50.48
5	179	86.76	735.6		57.41
6	972	8.67	13.5		93.66
7	1,200	25.33	32.0		95.43
8	1,465	35.03	36.2		97.26
9	1,923	52.50	41.4		100.42
10	2,475	28.26	17.3		102.75
11	2,754	47.66	26.2		103.80
12	3,576	48.12	20.4		105.46
13	7,550	5.79	1.2		110.34
14	10,380	75.00	10.9	Upper Marker	113.00

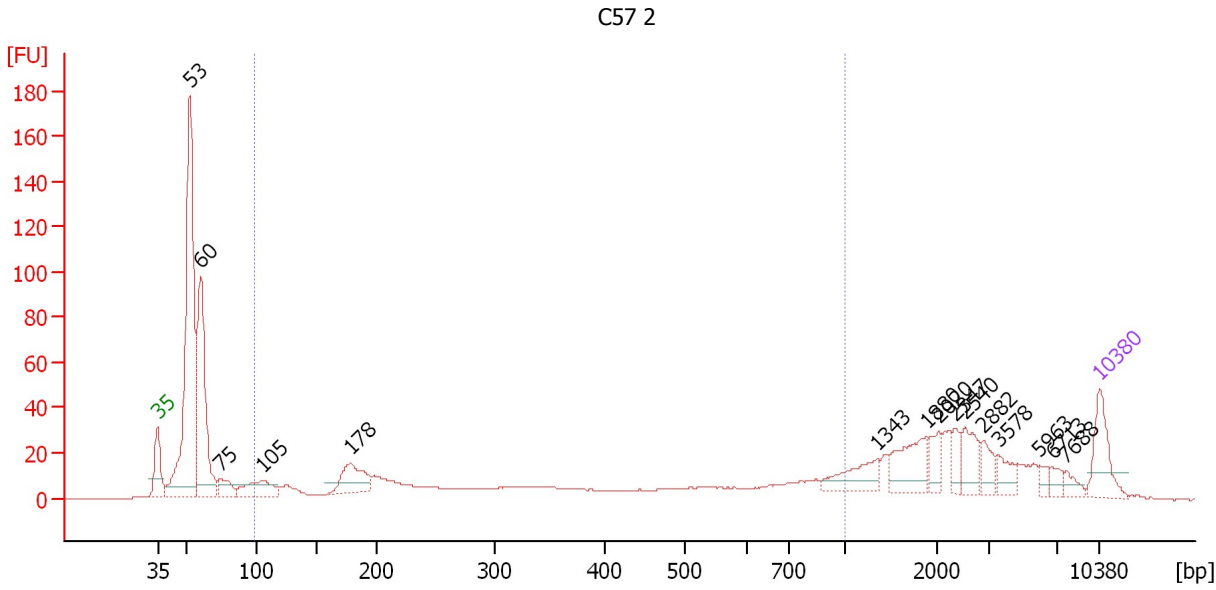
Region table for sample 1 : C57 1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
101	409	1,000	311.6	4,863.6	34	58.4	786.77

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : C57 2

Number of peaks found: 15 Corr. Area 1: 336.1
 Noise: 0.2

Peak table for sample 2 : C57 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	53	838.01	24,077.6		45.42
3	60	407.51	10,226.2		46.20
4	75	50.32	1,022.3		47.67
5	105	90.81	1,307.7		50.76
6	178	116.63	993.3		57.34
7	1,343	65.62	74.0		96.41
8	1,880	90.88	73.2		100.12
9	2,020	36.27	27.2		101.02
10	2,347	29.87	19.3		102.26
11	2,540	54.66	32.6		102.99
12	2,882	31.99	16.8		104.29
13	3,578	32.86	13.9		105.47
14	5,963	13.75	3.5		108.50
15	6,713	17.68	4.0		109.46
16	7,688	16.83	3.3		110.47
17	10,380	75.00	10.9	Upper Marker	113.00

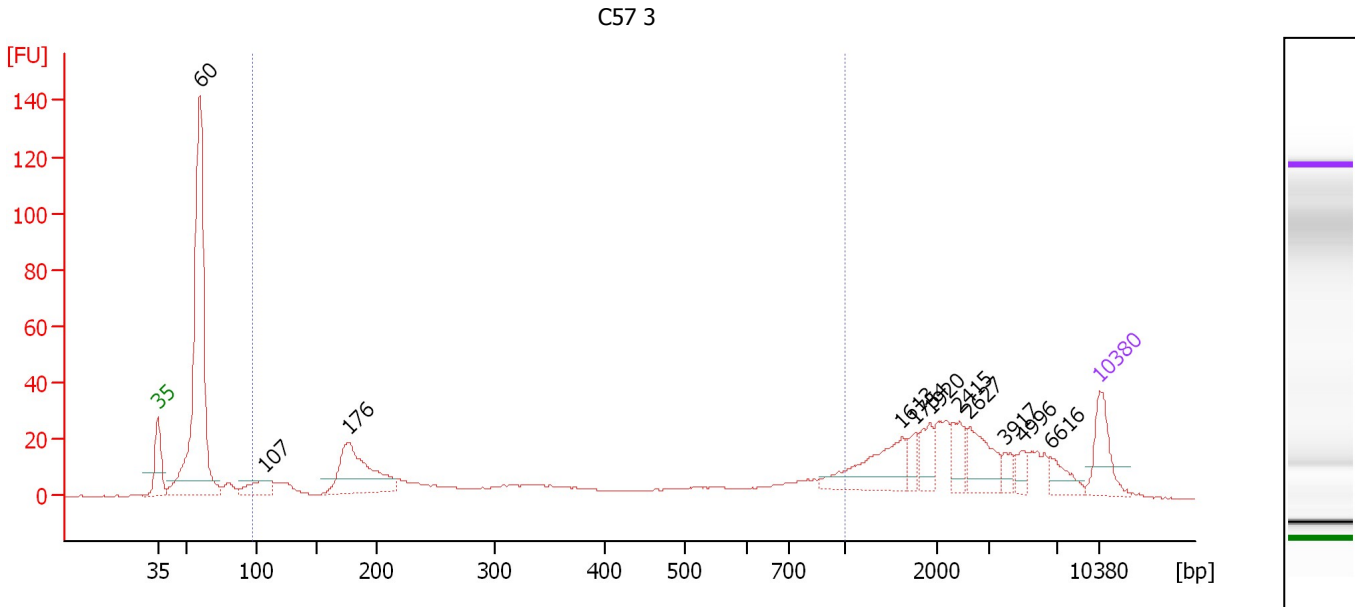
Region table for sample 2 : C57 2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
99	408	1,000	336.1	5,142.3	30	60.0	804.29

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : C57 3

Number of peaks found: 11 Corr. Area 1: 275.9
 Noise: 0.2

Peak table for sample 3 : C57 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	60	923.83	23,387.0		46.15
3	107	66.08	937.3		50.91
4	176	258.66	2,229.2		57.15
5	1,613	127.01	119.3		98.28
6	1,754	27.17	23.5		99.25
7	1,920	44.31	35.0		100.40
8	2,415	48.73	30.6		102.52
9	2,627	81.79	47.2		103.32
10	3,917	20.93	8.1		105.90
11	4,996	24.58	7.5		107.27
12	6,616	37.13	8.5		109.33
13	10,380	75.00	10.9	Upper Marker	113.00

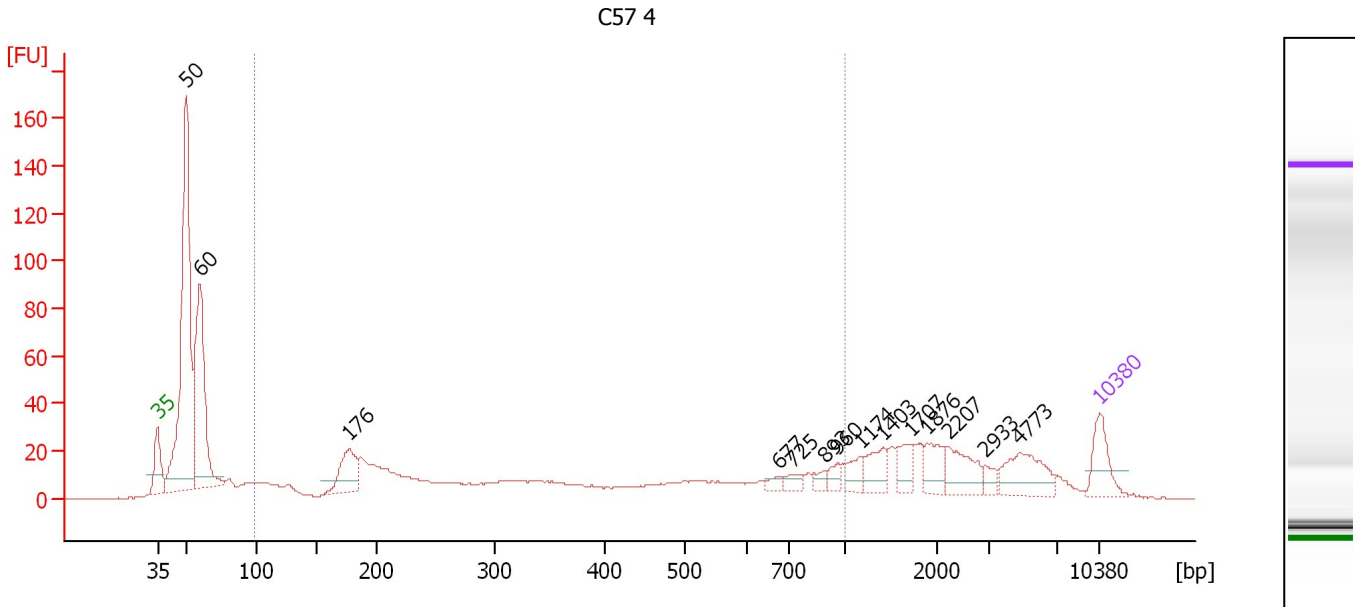
Region table for sample 3 : C57 3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
98	386	1,000	275.9	5,458.0	33	63.9	811.78

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : C57 4

Number of peaks found: 14 Corr. Area 1: 460.9
 Noise: 0.2

Peak table for sample 4 : C57 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	50	996.56	30,345.4		45.10
3	60	532.54	13,476.9		46.15
4	176	146.19	1,256.9		57.19
5	677	17.18	38.4		89.18
6	725	25.33	52.9		90.23
7	893	17.70	30.0		92.57
8	960	25.62	40.4		93.50
9	1,174	38.57	49.8		95.25
10	1,403	61.36	66.3		96.83
11	1,707	46.08	40.9		98.93
12	1,876	61.28	49.5		100.10
13	2,207	80.68	55.4		101.73
14	2,933	20.28	10.5		104.48
15	4,773	106.62	33.8		106.99
16	10,380	75.00	10.9	Upper Marker	113.00

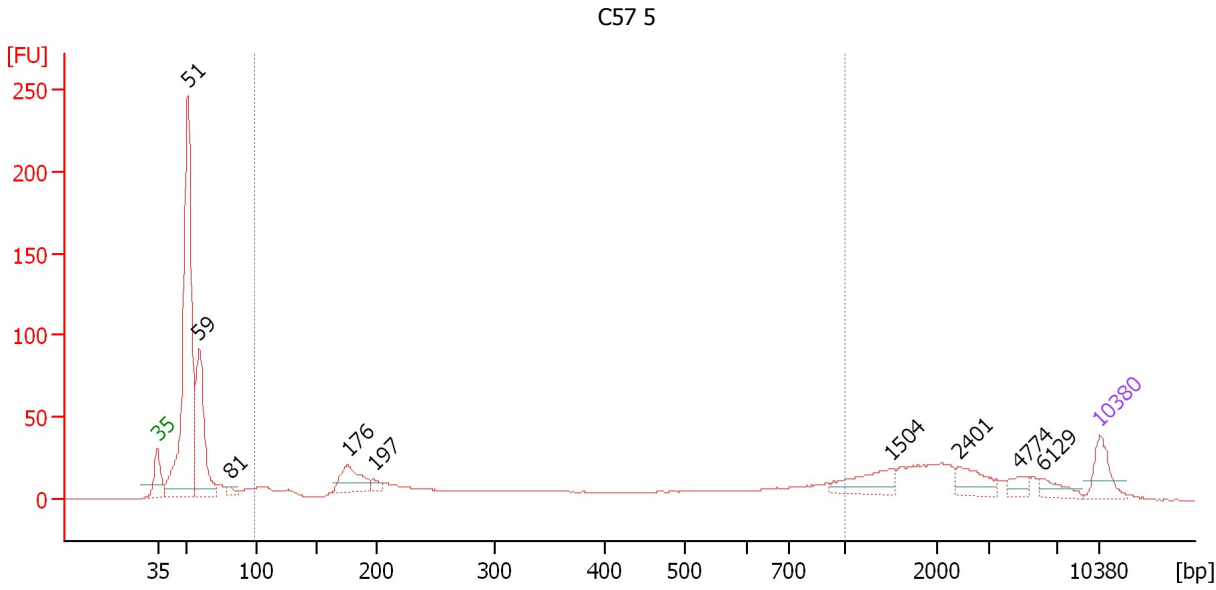
Region table for sample 4 : C57 4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
99	411	1,000	460.9	8,344.4	38	57.9	1,374.81

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : C57 5

Number of peaks found: 9 Corr. Area 1: 388.9
 Noise: 0.2

Peak table for sample 5 : C57 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	51	1,299.86	38,450.6		45.26
3	59	455.44	11,634.0		46.10
4	81	22.96	427.9		48.36
5	176	146.76	1,263.4		57.17
6	197	28.80	221.3		59.07
7	1,504	97.25	98.0		97.52
8	2,401	71.59	45.2		102.46
9	4,774	31.47	10.0		106.99
10	6,129	37.37	9.2		108.71
11	10,380	75.00	10.9	Upper Marker	113.00

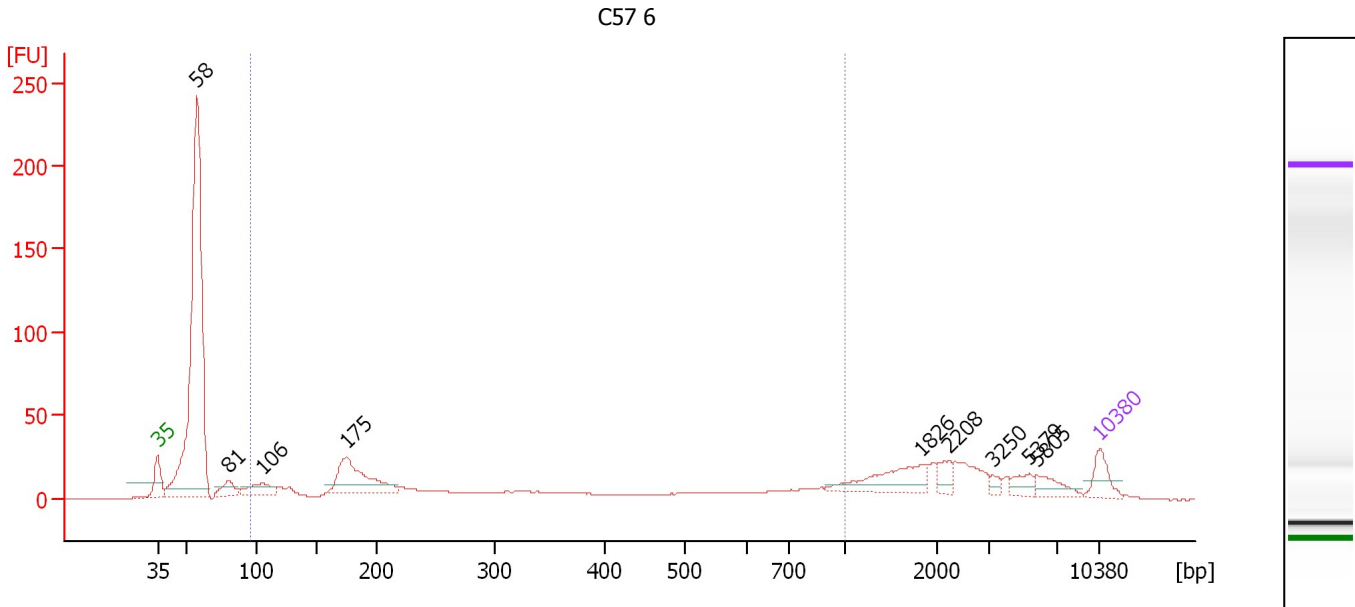
Region table for sample 5 : C57 5

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
100	400	1,000	388.9	6,949.6	32	60.2	1,090.36

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : C57 6

Number of peaks found: 9 Corr. Area 1: 342.1
 Noise: 0.2

Peak table for sample 6 : C57 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	58	2,136.72	55,894.2		45.95
3	81	90.22	1,693.0		48.30
4	106	127.42	1,821.2		50.83
5	175	368.96	3,202.7		57.04
6	1,826	173.29	143.8		99.75
7	2,208	52.69	36.2		101.73
8	3,250	22.12	10.3		105.05
9	5,379	46.87	13.2		107.76
10	5,805	61.76	16.1		108.30
11	10,380	75.00	10.9	Upper Marker	113.00

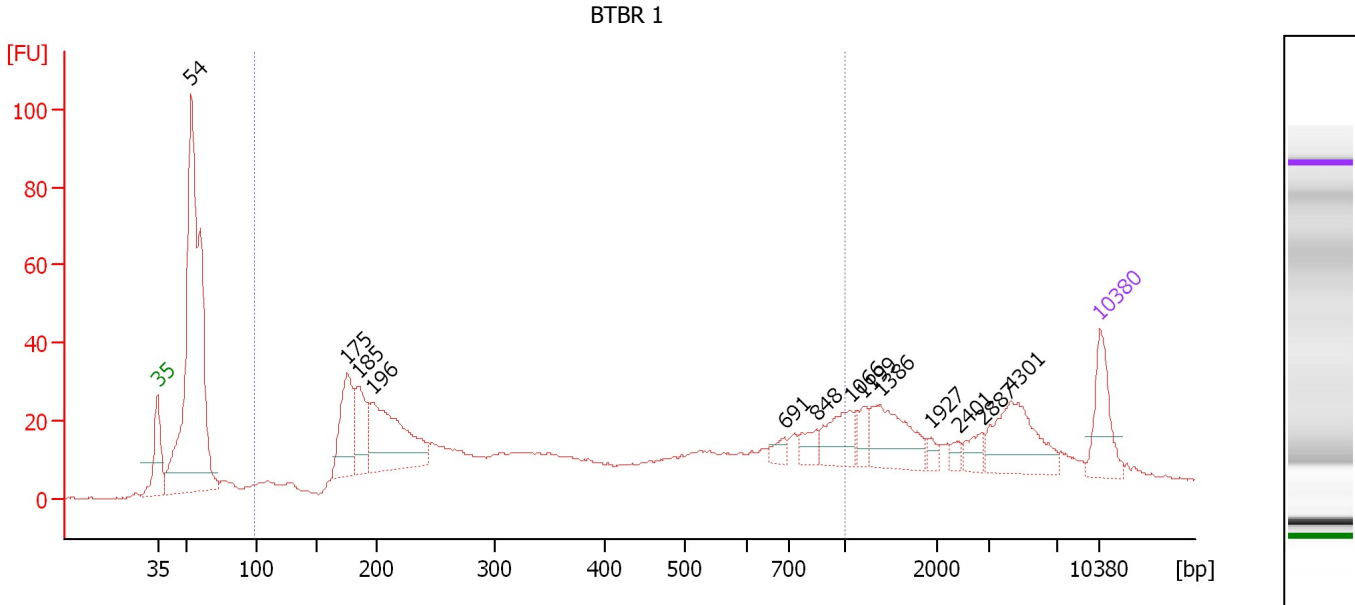
Region table for sample 6 : C57 6

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
97	359	1,000	342.1	9,589.7	31	66.3	1,330.37

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : BTBR 1

Number of peaks found: 13 Corr. Area 1: 684.9
 Noise: 0.4

Peak table for sample 7 : BTBR 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	54	965.28	27,266.1		45.51
3	175	162.42	1,405.4		57.09
4	185	106.86	876.8		57.94
5	196	263.83	2,044.1		58.92
6	691	20.26	44.4		89.61
7	848	29.24	52.3		91.93
8	1,066	71.99	102.3		94.50
9	1,199	25.47	32.2		95.42
10	1,386	107.32	117.4		96.71
11	1,927	12.06	9.5		100.45
12	2,401	11.34	7.2		102.47
13	2,887	24.81	13.0		104.30
14	4,301	123.05	43.3		106.39
15	10,380	75.00	10.9	Upper Marker	113.00

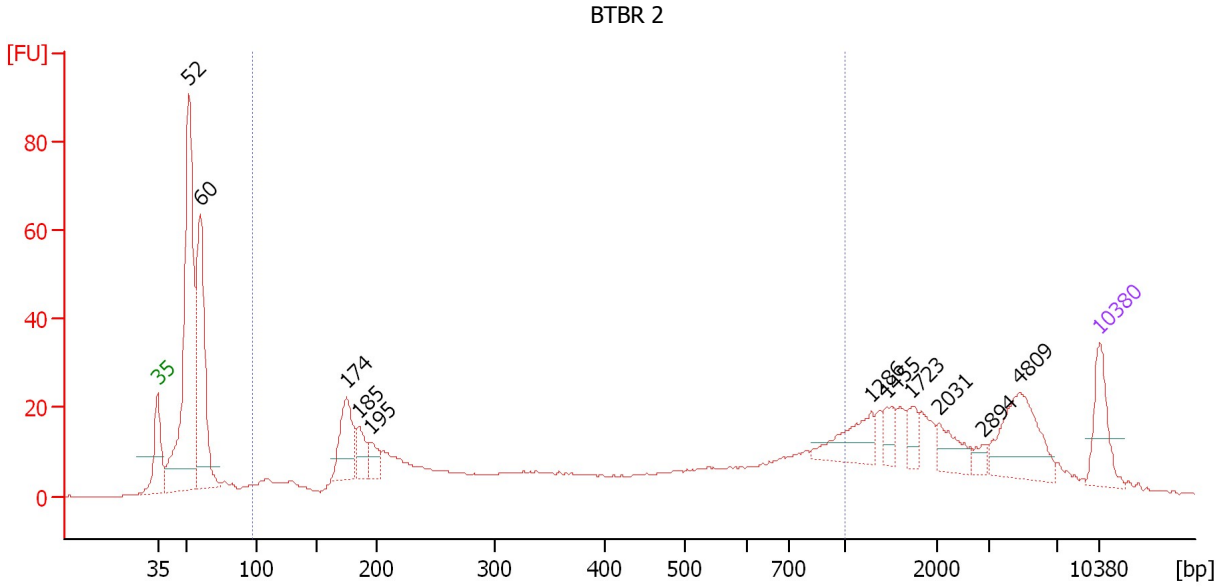
Region table for sample 7 : BTBR 1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
100	414	1,000	684.9	11,314.6	52	56.2	2,001.35

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : BTBR 2

Number of peaks found: 11 Corr. Area 1: 377.4
 Noise: 0.3

Peak table for sample 8 : BTBR 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	52	711.21	20,741.1		45.34
3	60	412.19	10,457.5		46.14
4	174	144.44	1,254.7		57.02
5	185	59.80	490.6		57.95
6	195	44.50	345.8		58.87
7	1,286	82.33	97.0		96.02
8	1,455	30.76	32.0		97.19
9	1,723	29.94	26.3		99.04
10	2,031	44.96	33.5		101.07
11	2,894	16.44	8.6		104.33
12	4,809	139.88	44.1		107.03
13	10,380	75.00	10.9	Upper Marker	113.00

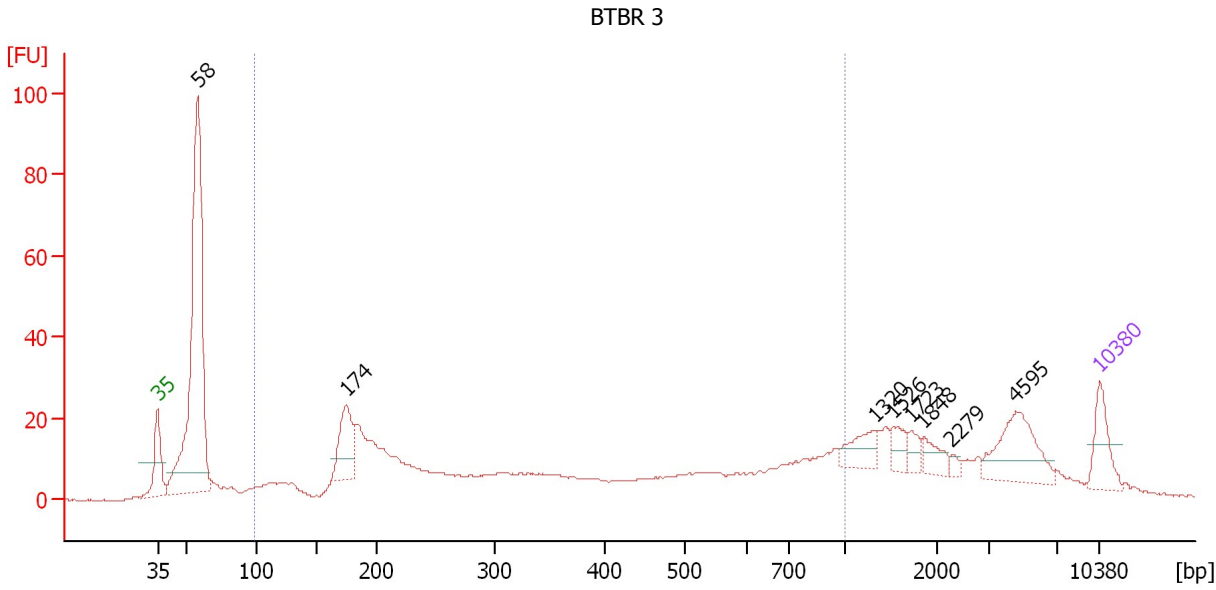
Region table for sample 8 : BTBR 2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
98	428	1,000	377.4	8,212.5	42	57.3	1,406.74

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : BTBR 3

Number of peaks found: 8 Corr. Area 1: 420.6
 Noise: 0.2

Peak table for sample 9 : BTBR 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	58	1,056.82	27,581.4		45.97
3	174	171.81	1,492.5		57.02
4	1,320	65.70	75.4		96.26
5	1,526	36.96	36.7		97.68
6	1,723	27.17	23.9		99.04
7	1,848	38.09	31.2		99.90
8	2,279	11.65	7.7		102.00
9	4,595	149.53	49.3		106.76
10	10,380	75.00	10.9	Upper Marker	113.00

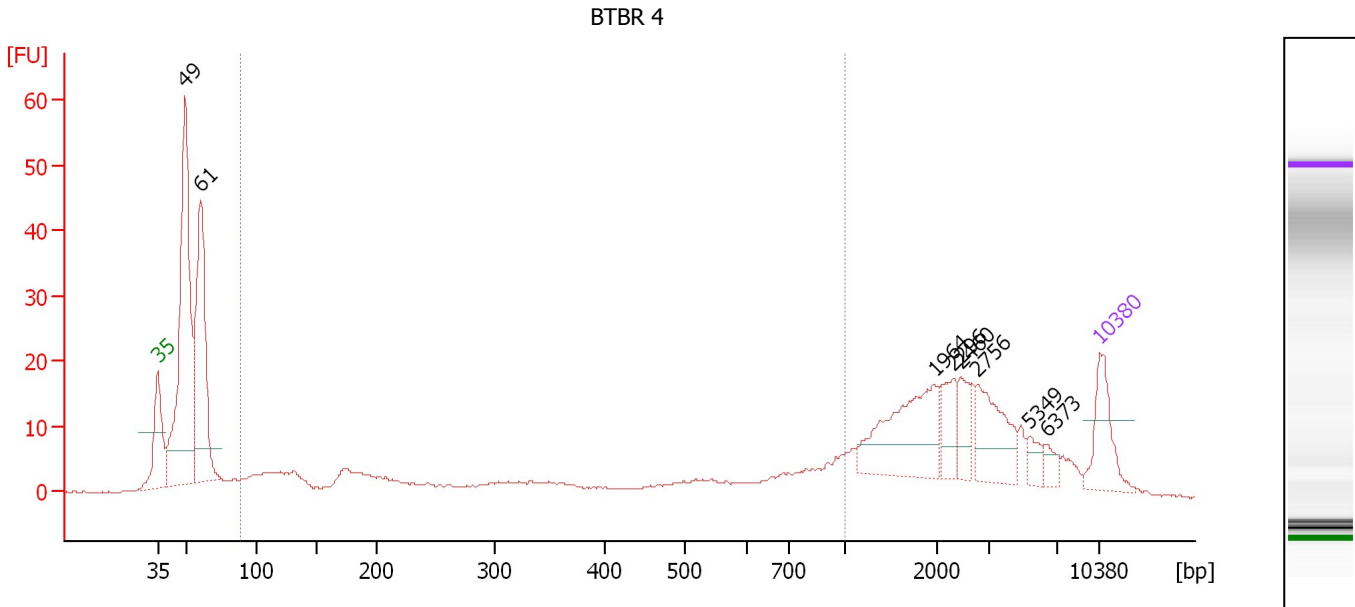
Region table for sample 9 : BTBR 3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
99	407	1,000	420.6	11,331.3	48	58.1	1,891.79

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : BTBR 4

Number of peaks found: 8 Corr. Area 1: 122.0
 Noise: 0.2

Peak table for sample 10 : BTBR 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	49	628.68	19,285.2		45.05
3	61	411.65	10,288.8		46.23
4	1,964	169.28	130.6		100.70
5	2,296	52.52	34.7		102.07
6	2,460	45.66	28.1		102.69
7	2,756	101.08	55.6		103.81
8	5,349	21.03	6.0		107.72
9	6,373	19.41	4.6		109.02
10	10,380	75.00	10.9	Upper Marker	113.00

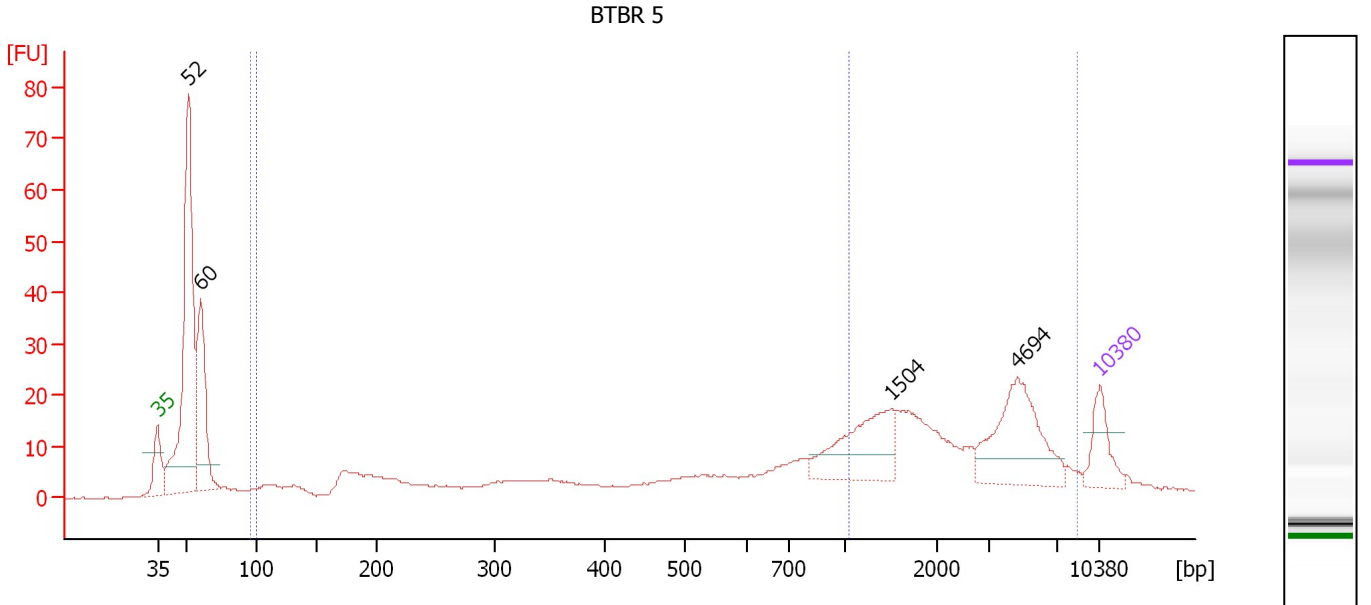
Region table for sample 10 : BTBR 4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
89	433	1,004	122.0	4,045.1	24	62.1	584.20

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
 Modified: 6/2/2015 3:15:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : BTBR 5

Number of peaks found: 4 Corr. Area 1: 399.3
 Noise: 0.2 Corr. Area 2: 189.1

Peak table for sample 11 : BTBR 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	52	819.05	24,016.2		45.31
3	60	330.07	8,313.6		46.18
4	1,504	202.91	204.4		97.53
5	4,694	238.63	77.0		106.89
6	10,380	75.00	10.9	Upper Marker	113.00

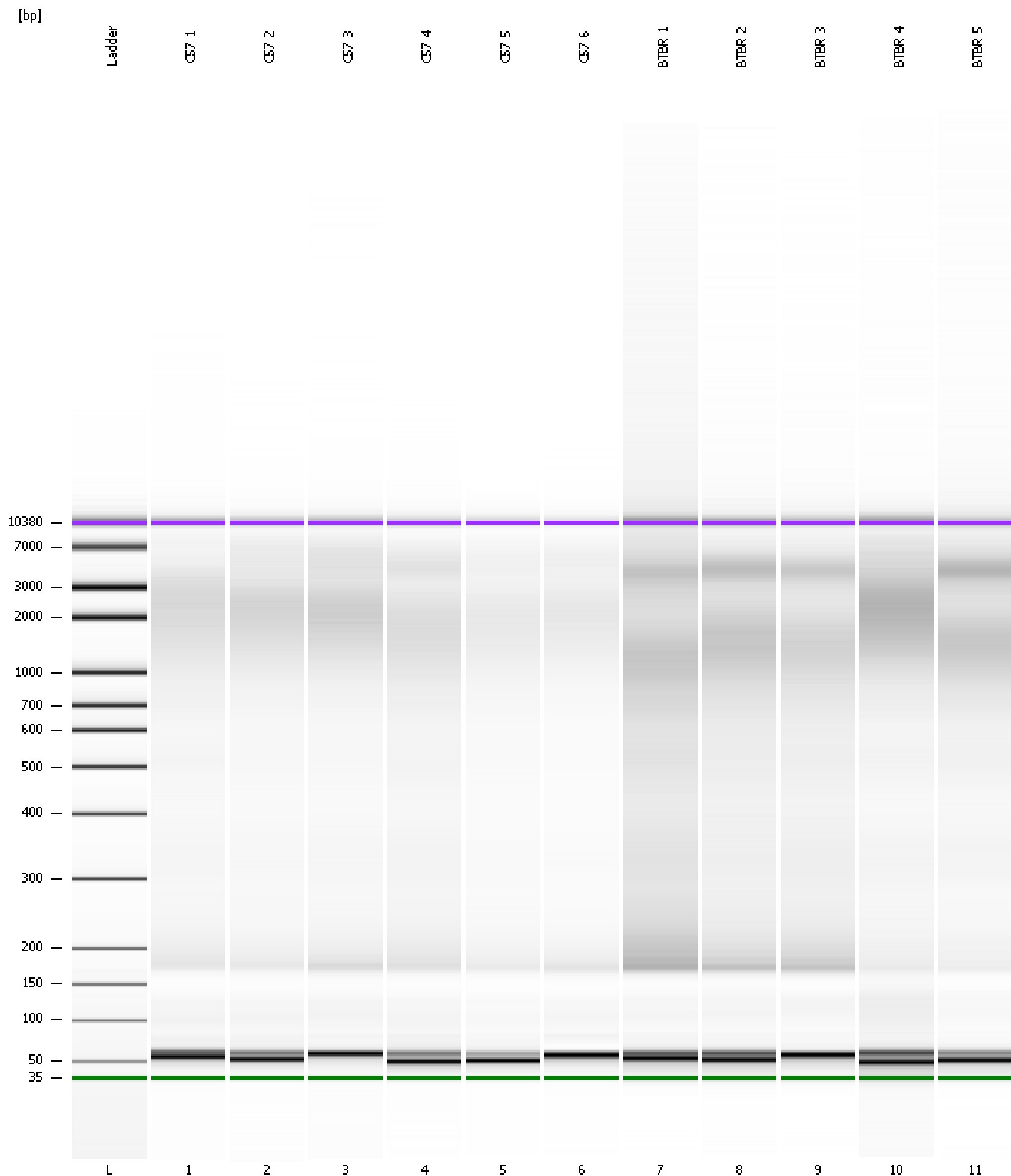
Region table for sample 11 : BTBR 5

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
96	2,048	8,561	399.3	5,402.4	66	94.3	1,657.16
100	507	1,054	189.1	4,778.8	31	52.8	922.25

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
Modified: 6/2/2015 3:15:25 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02_003.xad

Created: 6/2/2015 2:13:20 PM
Modified: 6/2/2015 3:15:25 PM

Curves

Standard Curve

