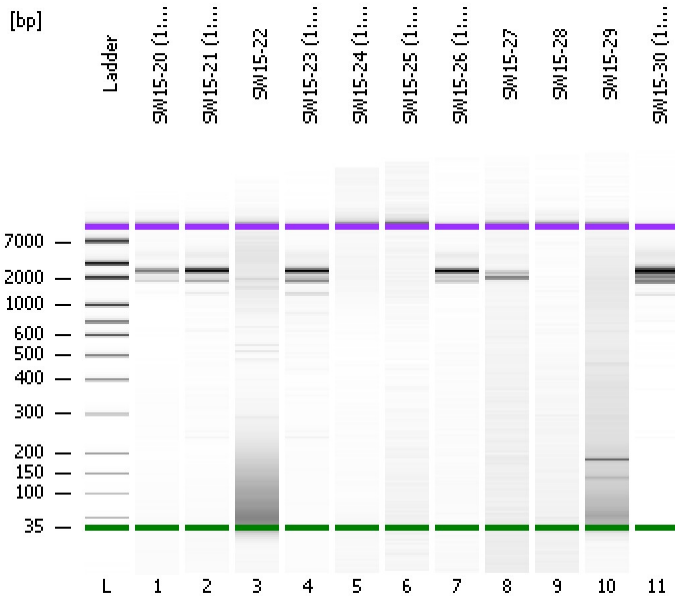


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
Modified: 7/14/2015 10:09:56 AM

Electrophoresis File Run Summary



Instrument Information:

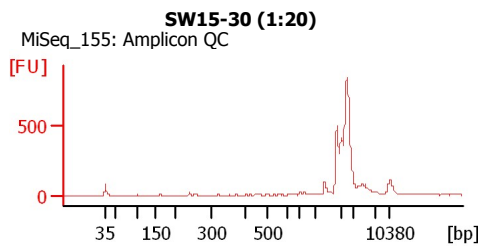
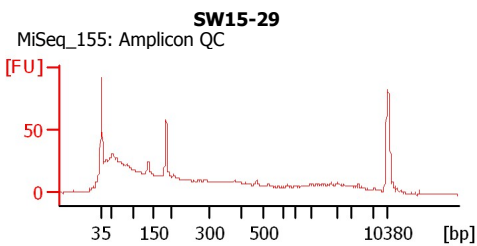
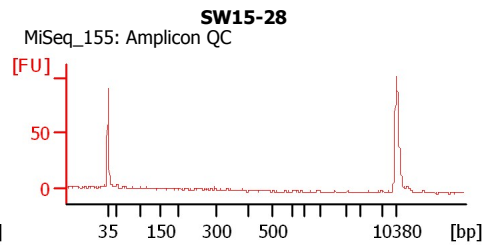
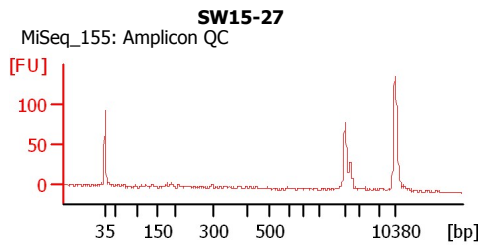
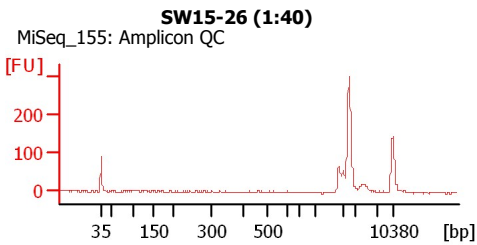
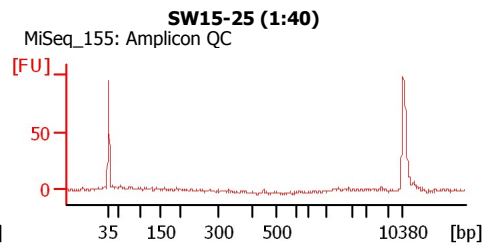
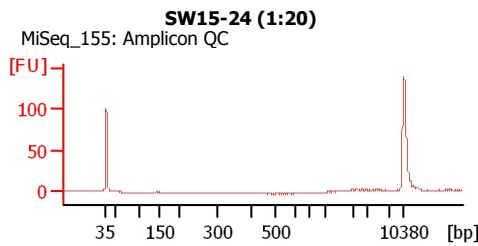
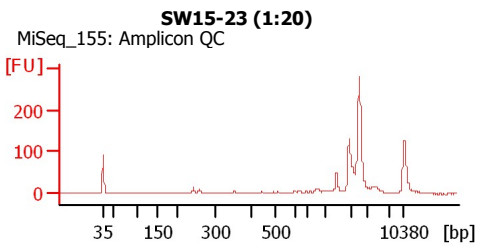
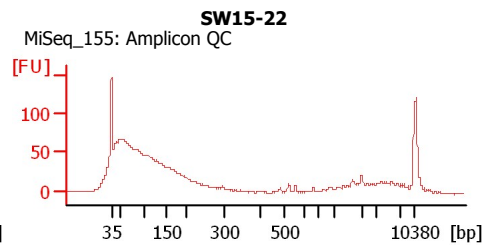
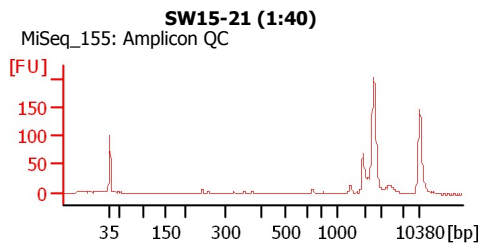
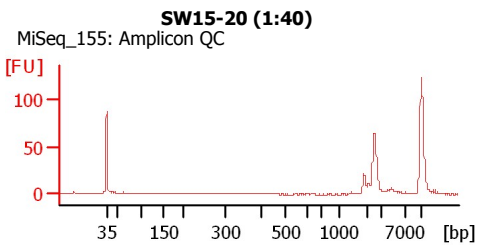
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
Modified: 7/14/2015 10:09:56 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
SW15-20 (1:40)	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-21 (1:40)	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-22	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-23 (1:20)	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-24 (1:20)	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-25 (1:40)	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-26 (1:40)	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-27	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-28	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-29	MiSeq_155: Amplicon QC	<input type="checkbox"/>	✓			
SW15-30 (1:20)	MiSeq_155: Amplicon QC	<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\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
Modified: 7/14/2015 10:09:56 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

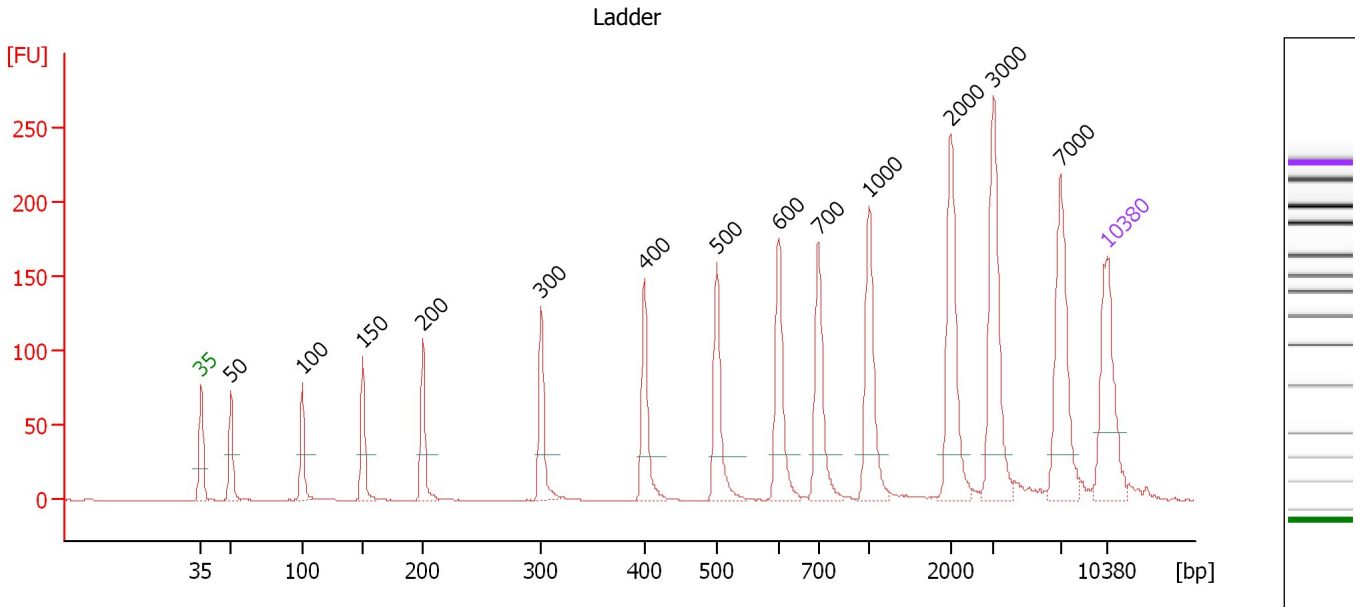
Ladder

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\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

Peak table for Ladder

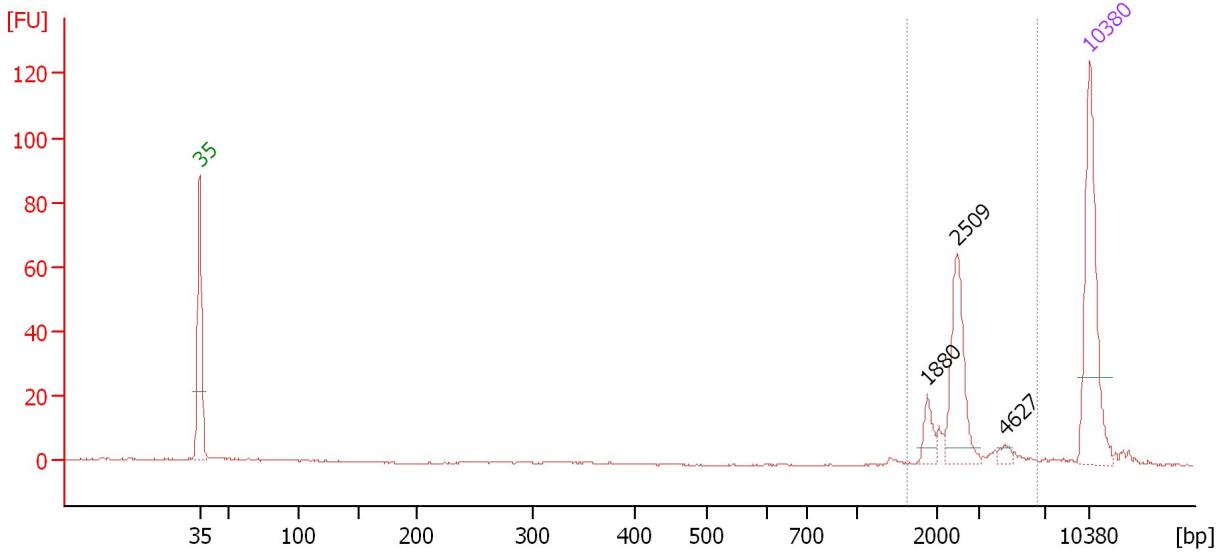
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.27
3	100	150.00	2,272.7	Ladder Peak	50.79
4	150	150.00	1,515.2	Ladder Peak	55.49
5	200	150.00	1,136.4	Ladder Peak	60.11
6	300	150.00	757.6	Ladder Peak	69.26
7	400	150.00	568.2	Ladder Peak	77.26
8	500	150.00	454.5	Ladder Peak	82.86
9	600	150.00	378.8	Ladder Peak	87.65
10	700	150.00	324.7	Ladder Peak	90.70
11	1,000	150.00	227.3	Ladder Peak	94.61
12	2,000	150.00	113.6	Ladder Peak	100.92
13	3,000	150.00	75.8	Ladder Peak	104.22
14	7,000	150.00	32.5	Ladder Peak	109.41
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-20 (1:40) [MiSeq_155: Amplicon QC]



Overall Results for sample 1 : SW15-20 (1:40)

Number of peaks found: 3 Corr. Area 1: 113.3
 Noise: 0.2

Peak table for sample 1 : SW15-20 (1:40)

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	1,880	11.54	9.3		100.17
3	2,509	52.14	31.5		102.60
4	4,627	3.95	1.3		106.33
5	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 1 : SW15-20 (1:40)

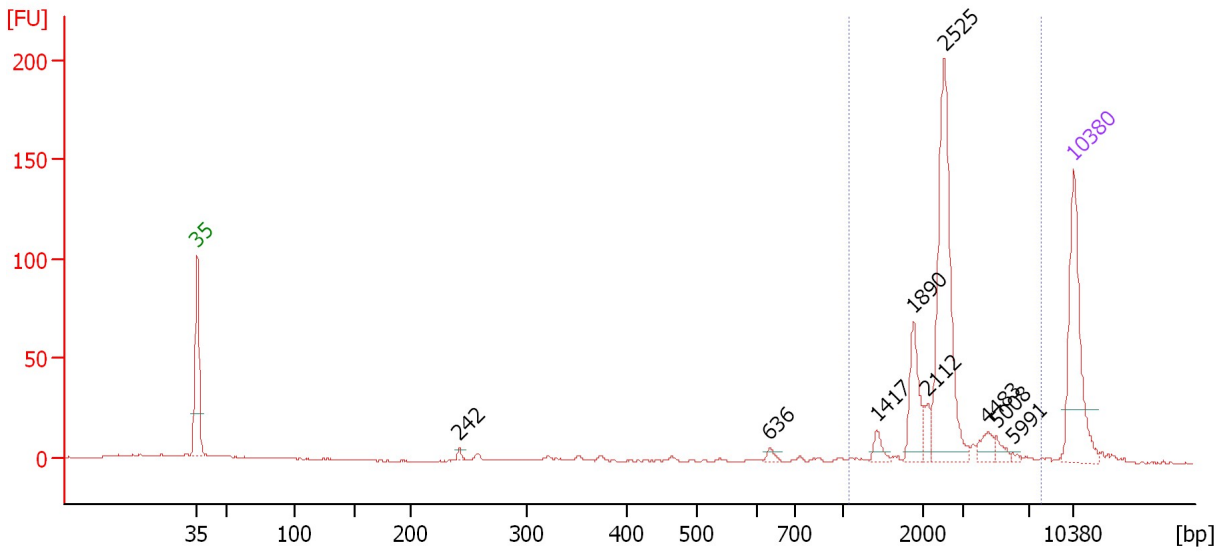
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
1,648	2,652	6,622	113.3	45.8	85	30.6	75.64

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-21 (1:40) [MiSeq_155: Amplicon QC]



Overall Results for sample 2 : SW15-21 (1:40)

Number of peaks found: 9 Corr. Area 1: 383.6
 Noise: 0.4

Peak table for sample 2 : SW15-21 (1:40)

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	242	3.63	22.7		63.95
3	636	4.22	10.1		88.73
4	1,417	8.15	8.7		97.25
5	1,890	36.98	29.7		100.23
6	2,112	9.13	6.5		101.29
7	2,525	134.64	80.8		102.65
8	4,483	10.32	3.5		106.14
9	5,008	6.17	1.9		106.83
10	5,991	1.77	0.4		108.10
11	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 2 : SW15-21 (1:40)

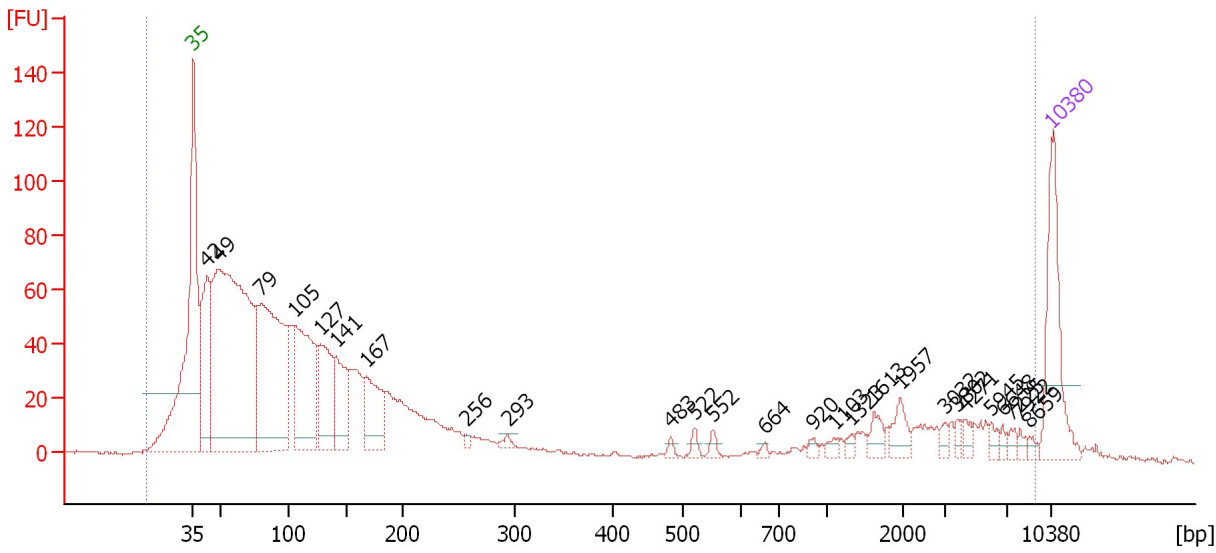
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
1,071	2,632	7,885	383.6	134.1	84	35.5	215.18

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-22 [MiSeq_155: Amplicon QC]



Overall Results for sample 3 : SW15-22

Number of peaks found: 26 Corr. Area 1: 2,068.4
 Noise: 0.5

Peak table for sample 3 : SW15-22

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	42	172.30	6,145.6		44.13
3	49	660.88	20,516.3		45.09
4	79	351.72	6,706.9		48.52
5	105	206.46	2,992.5		51.22
6	127	114.32	1,361.8		53.35
7	141	81.13	874.2		54.61
8	167	80.15	725.9		57.09
9	256	4.64	27.4		65.26
10	293	6.01	31.0		68.65
11	483	4.19	13.1		81.91
12	522	6.44	18.7		83.91
13	552	6.08	16.7		85.35
14	664	3.15	7.2		89.61
15	920	4.65	7.7		93.57
16	1,103	5.47	7.5		95.26
17	1,323	4.37	5.0		96.65
18	1,613	12.31	11.6		98.48
19	1,957	16.54	12.8		100.65
20	3,032	5.54	2.8		104.26
21	3,802	4.64	1.9		105.26
22	4,271	6.31	2.2		105.87
23	5,945	6.29	1.6		108.04
24	6,648	3.75	0.9		108.96
25	7,225	4.86	1.0		109.65

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

... Peak table for sample 3 : SW15-22

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	7,922	3.76	0.7		110.39
27	8,659	3.87	0.7		111.17
28	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 3 : SW15-22

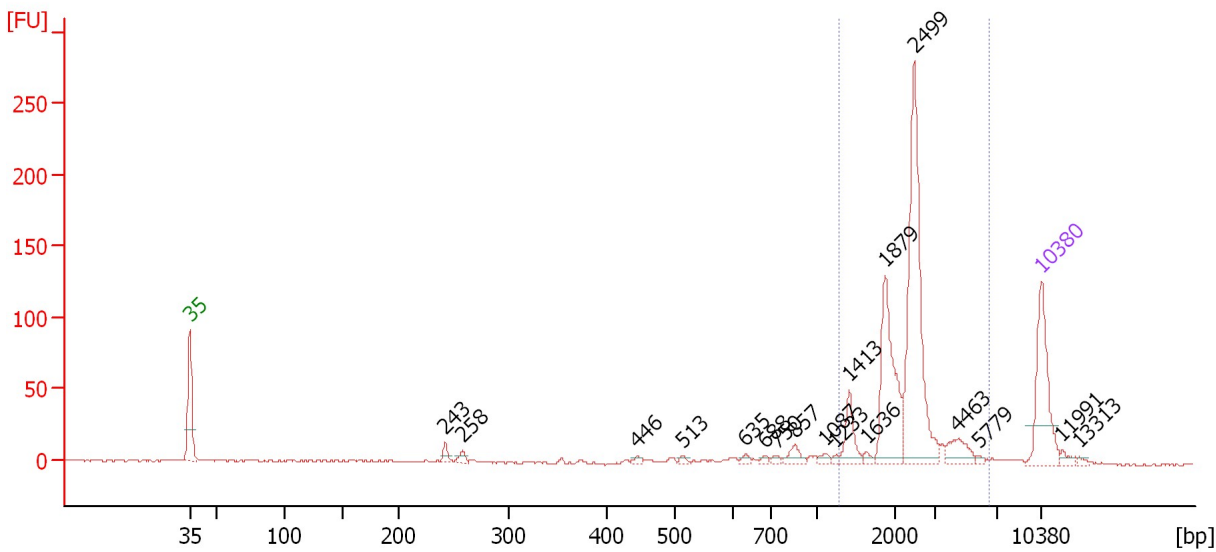
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/ μ l]
10	699	9,150	2,068.4	39,525.5	99	100.0	2,253.11

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-23 (1:20) [MiSeq_155: Amplicon QC]



Overall Results for sample 4 : SW15-23 (1:20)

Number of peaks found: 18 Corr. Area 1: 566.9
 Noise: 0.5

Peak table for sample 4 : SW15-23 (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	243	11.09	69.2		64.04
3	258	8.27	48.5		65.44
4	446	4.60	15.7		79.82
5	513	4.31	12.7		83.50
6	635	4.54	10.8		88.72
7	688	3.80	8.4		90.34
8	750	4.41	8.9		91.35
9	857	13.25	23.4		92.75
10	1,087	5.69	7.9		95.16
11	1,233	2.54	3.1		96.08
12	1,413	29.64	31.8		97.22
13	1,636	4.70	4.3		98.62
14	1,879	106.89	86.2		100.16
15	2,499	197.35	119.6		102.57
16	4,463	21.45	7.3		106.12
17	5,779	2.71	0.7		107.83
18	10,380	75.00	10.9	Upper Marker	113.00
19	11,991	0.00	0.0		114.71
20	13,313	0.00	0.0		116.11

Region table for sample 4 : SW15-23 (1:20)

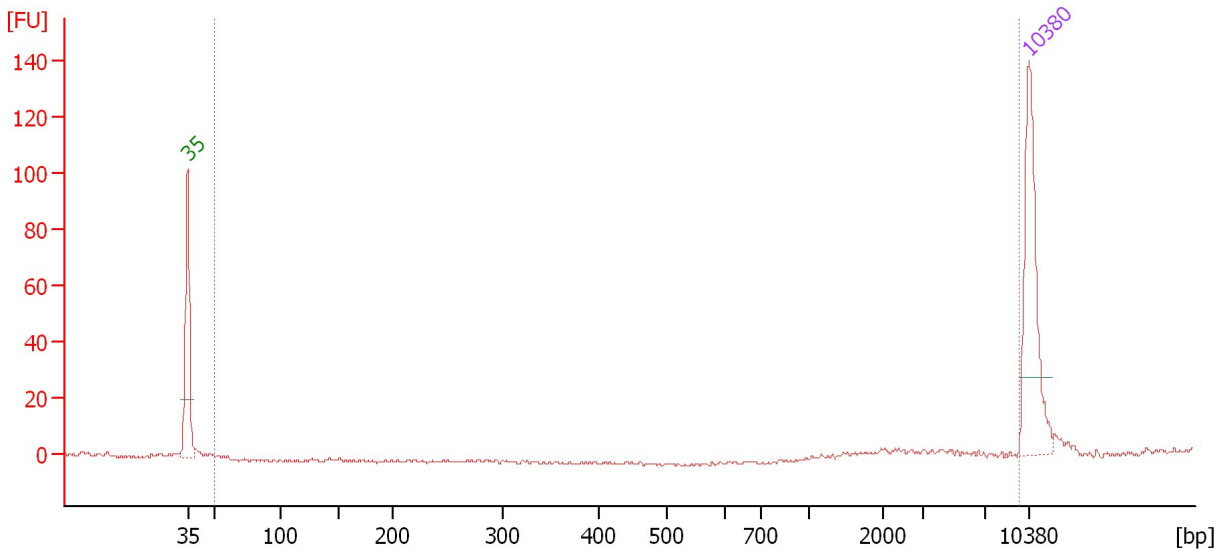
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
1,279	2,431	6,468	566.9	237.3	84	30.8	356.67

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-24 (1:20) [MiSeq_155: Amplicon QC]



Overall Results for sample 5 : SW15-24 (1:20)

Number of peaks found: 0 Corr. Area 1: 1.7
Noise: 0.7

Peak table for sample 5 : SW15-24 (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	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 5 : SW15-24 (1:20)

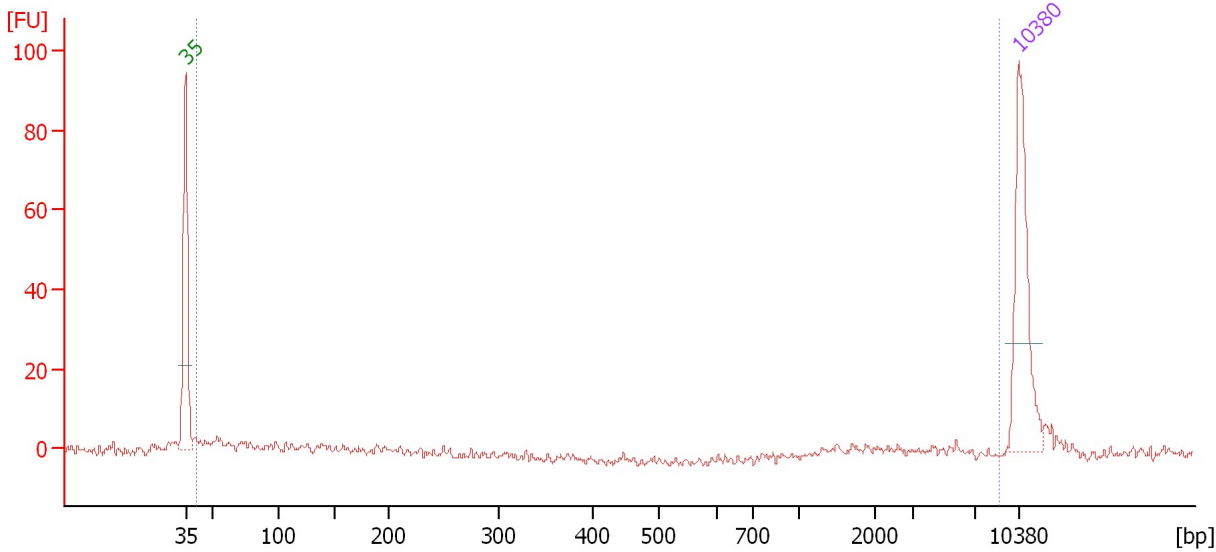
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
49	3,576	9,649	1.7	0.5	17	64.1	0.90

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-25 (1:40) [MiSeq_155: Amplicon QC]



Overall Results for sample 6 : SW15-25 (1:40)

Number of peaks found: 0 Corr. Area 1: 70.7
 Noise: 1.2

Peak table for sample 6 : SW15-25 (1:40)

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 6 : SW15-25 (1:40)

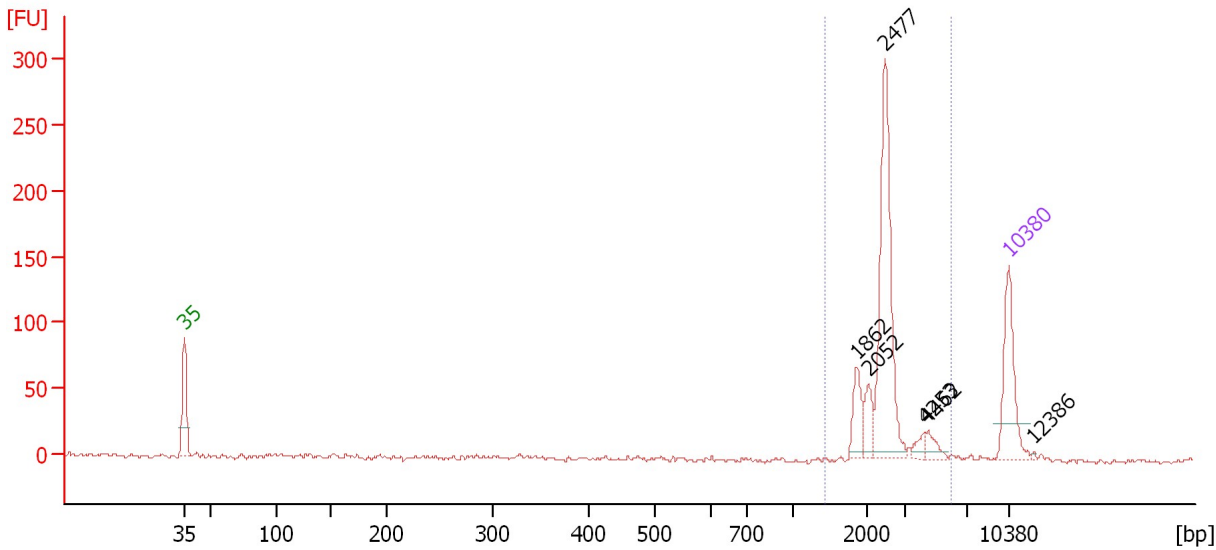
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
42	1,476	8,878	70.7	1,357.4	65	100.0	87.05

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-26 (1:40) [MiSeq_155: Amplicon QC]



Overall Results for sample 7 : SW15-26 (1:40)

Number of peaks found: 6 Corr. Area 1: 468.0
 Noise: 1.6

Peak table for sample 7 : SW15-26 (1:40)

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	1,862	34.99	28.5		100.05
3	2,052	25.06	18.5		101.09
4	2,477	189.47	115.9		102.50
5	4,253	10.34	3.7		105.85
6	4,462	12.92	4.4		106.12
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,386	0.00	0.0		115.13

Region table for sample 7 : SW15-26 (1:40)

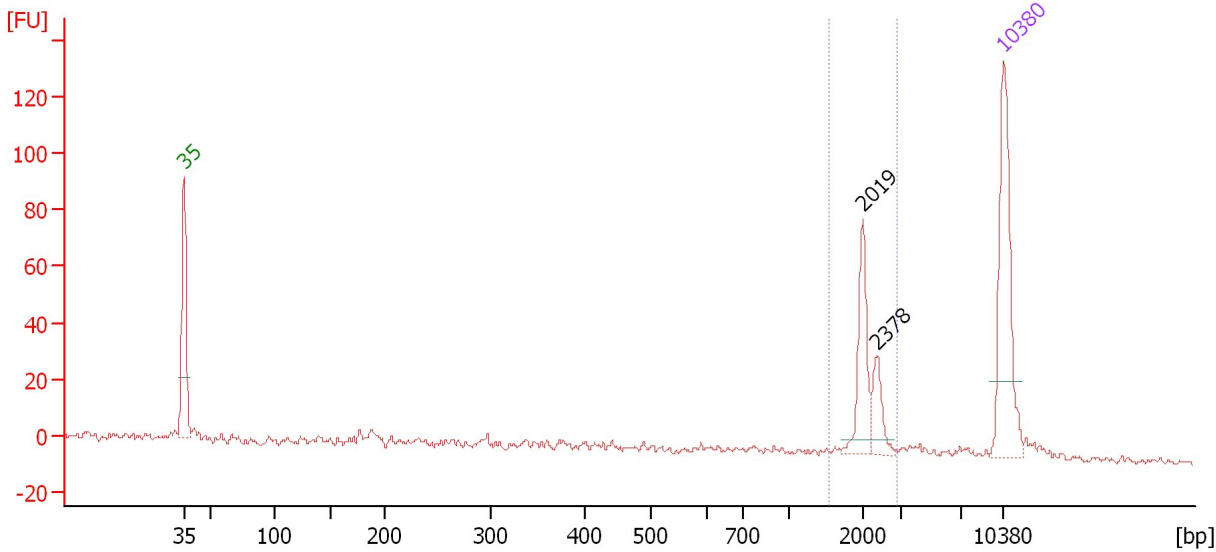
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
1,438	2,555	5,963	468.0	170.6	95	25.8	275.57

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-27 [MiSeq_155: Amplicon QC]



Overall Results for sample 8 : SW15-27

Number of peaks found: 2 Corr. Area 1: 107.3
 Noise: 1.3

Peak table for sample 8 : SW15-27

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	2,019	39.82	29.9		100.98
3	2,378	19.19	12.2		102.17
4	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 8 : SW15-27

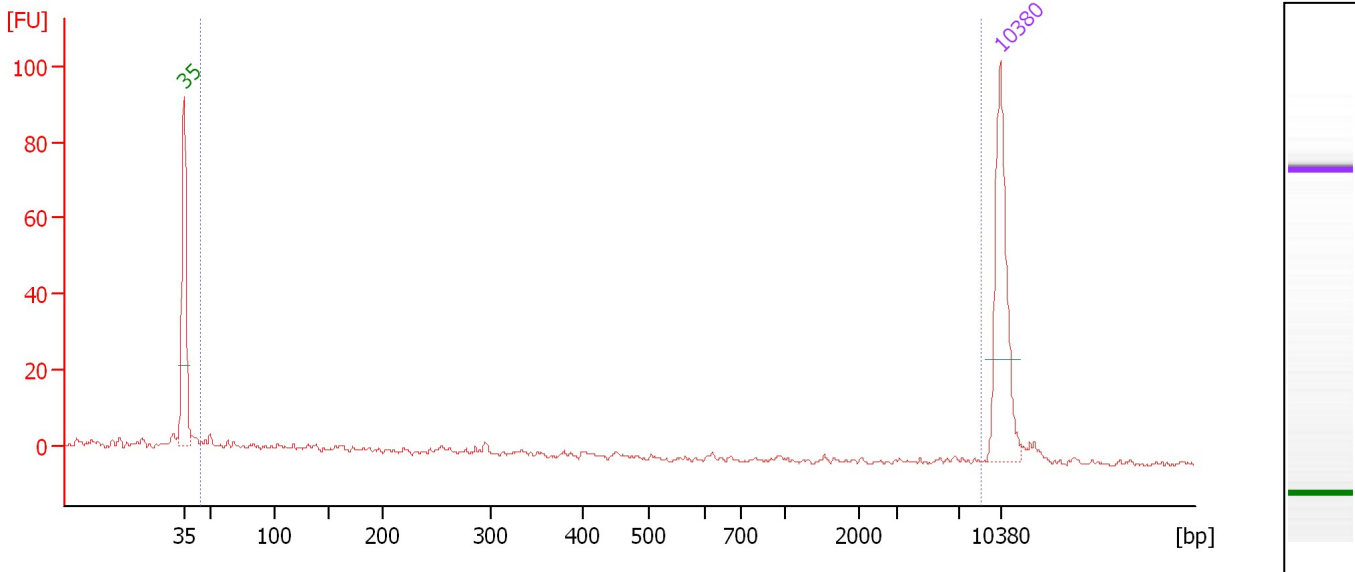
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
1,556	2,138	2,900	107.3	42.7	55	10.3	59.80

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-28 [MiSeq_155: Amplicon QC]



Overall Results for sample 9 : SW15-28

Number of peaks found: 0 Corr. Area 1: 22.7
Noise: 0.6

Peak table for sample 9 : SW15-28

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 9 : SW15-28

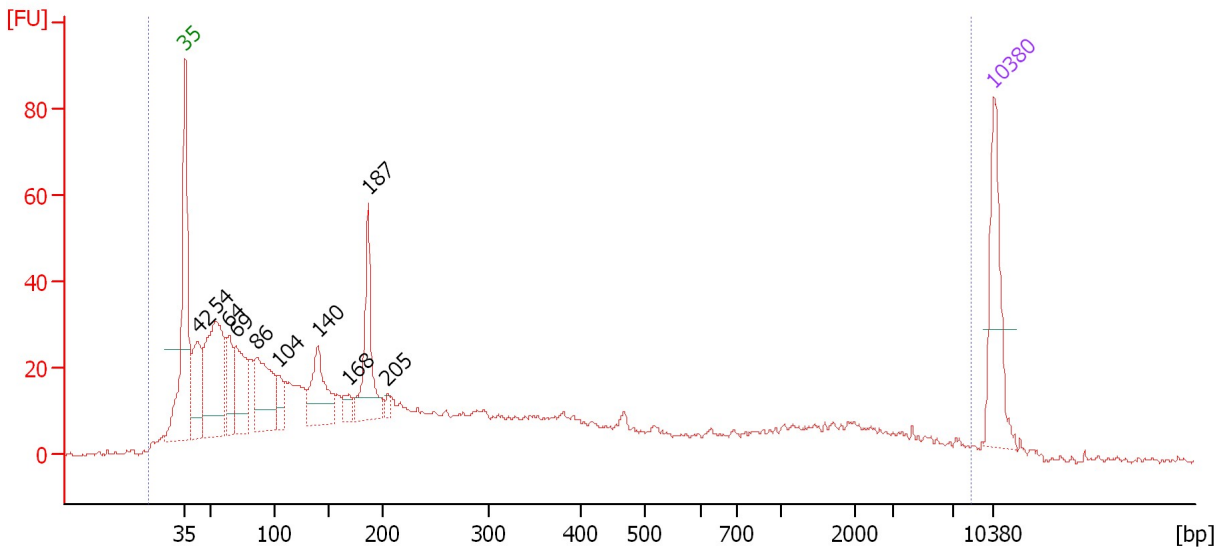
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
45	381	8,846	22.7	521.0	41	100.0	30.30

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-29 [MiSeq_155: Amplicon QC]



Overall Results for sample 10 : SW15-29

Number of peaks found: 10 Corr. Area 1: 1,272.9
 Noise: 0.5

Peak table for sample 10 : SW15-29

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	42	103.13	3,691.8		44.11
3	54	214.33	6,000.5		45.72
4	64	67.89	1,603.7		46.83
5	69	99.23	2,174.1		47.38
6	86	126.87	2,238.8		49.23
7	104	31.31	456.1		51.17
8	140	94.31	1,021.8		54.54
9	168	18.91	170.4		57.17
10	187	108.85	883.7		58.87
11	205	8.31	61.5		60.53
12	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 10 : SW15-29

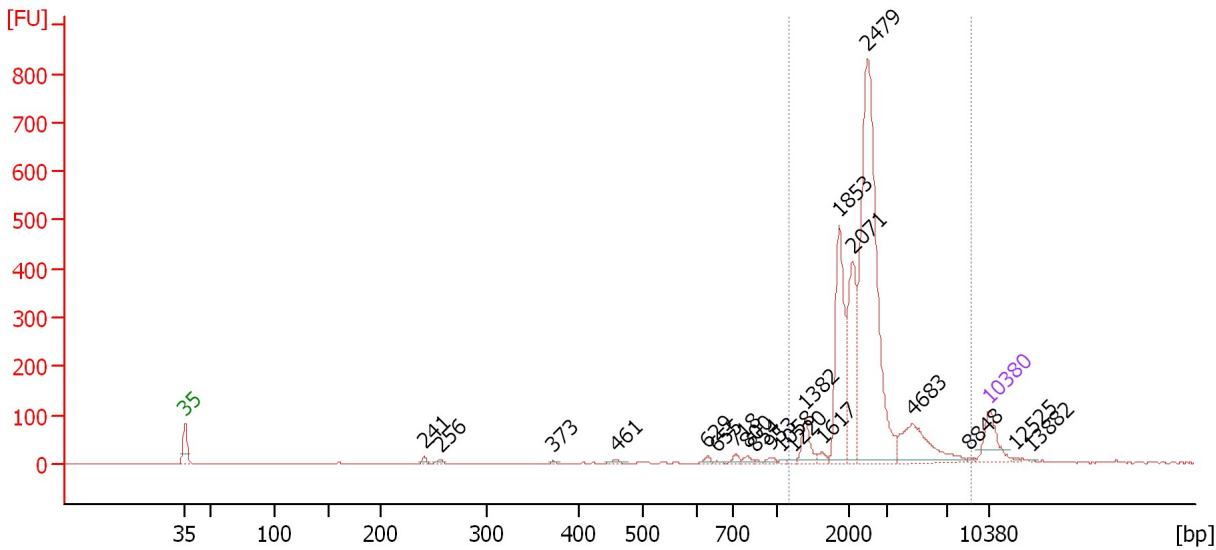
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
15	573	8,518	1,272.9	31,234.9	98	100.0	2,154.56

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
 Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

SW15-30 (1:20) [MiSeq_155: Amplicon QC]



Overall Results for sample 11 : SW15-30 (1:20)

Number of peaks found: 21 Corr. Area 1: 2,451.3
 Noise: 0.6

Peak table for sample 11 : SW15-30 (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	241	11.75	73.9		63.86
3	256	9.23	54.6		65.25
4	373	3.07	12.5		75.10
5	461	7.40	24.3		80.67
6	629	8.49	20.5		88.52
7	655	3.03	7.0		89.31
8	718	11.55	24.4		90.94
9	800	10.10	19.1		92.00
10	854	2.54	4.5		92.70
11	953	8.27	13.2		94.00
12	1,058	3.16	4.5		94.98
13	1,220	4.07	5.1		96.00
14	1,382	53.14	58.3		97.02
15	1,617	11.55	10.8		98.51
16	1,853	263.93	215.8		99.99
17	2,071	220.16	161.1		101.16
18	2,479	796.38	486.7		102.50
19	4,683	143.57	46.5		106.40
20	8,848	3.46	0.6		111.37
21	10,380	75.00	10.9	Upper Marker	113.00
22	12,525	0.00	0.0		115.28
23	13,882	0.00	0.0		116.72

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
Modified: 7/14/2015 10:09:56 AM

Electropherogram Summary Continued ...

... Region table for sample 11 : SW15-30 (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]
1,155	2,589	8,943	2,451.3	953.4	 95	40.3	1,488.64

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-14\2015-07-14_001.xad

Created: 7/14/2015 9:13:22 AM
Modified: 7/14/2015 10:09:56 AM

Gel Image

