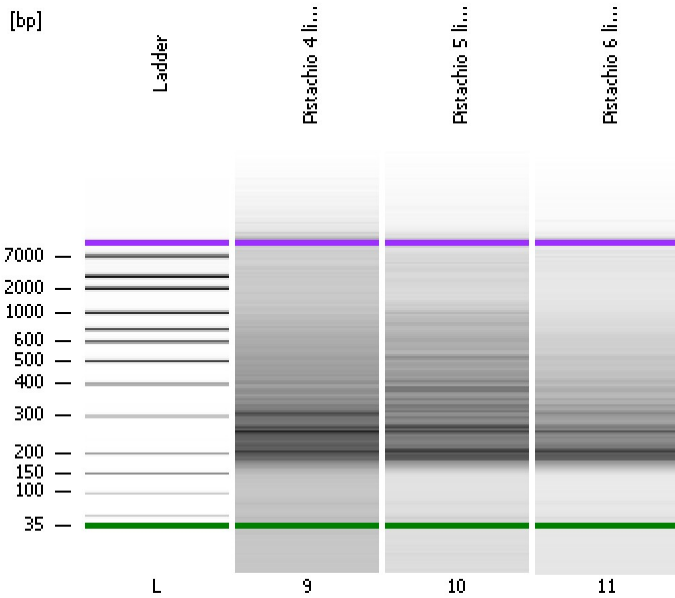


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
Modified: 11/5/2015 5:03:51 PM

Electrophoresis File Run Summary



Instrument Information:

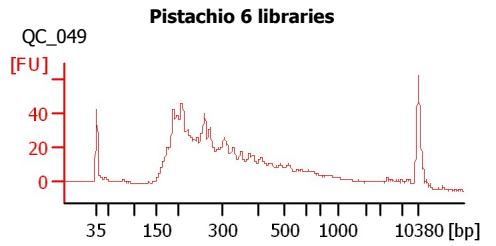
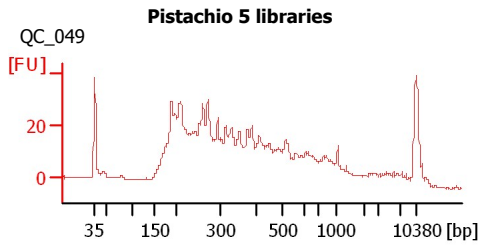
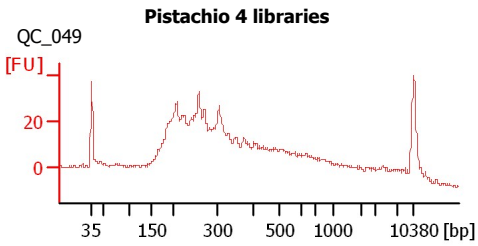
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
Modified: 11/5/2015 5:03:51 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Pistachio 4 libraries	QC_049	<input type="checkbox"/>	✓			
Pistachio 5 libraries	QC_049	<input type="checkbox"/>	✓			
Pistachio 6 libraries	QC_049	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

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

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
Modified: 11/5/2015 5:03:51 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

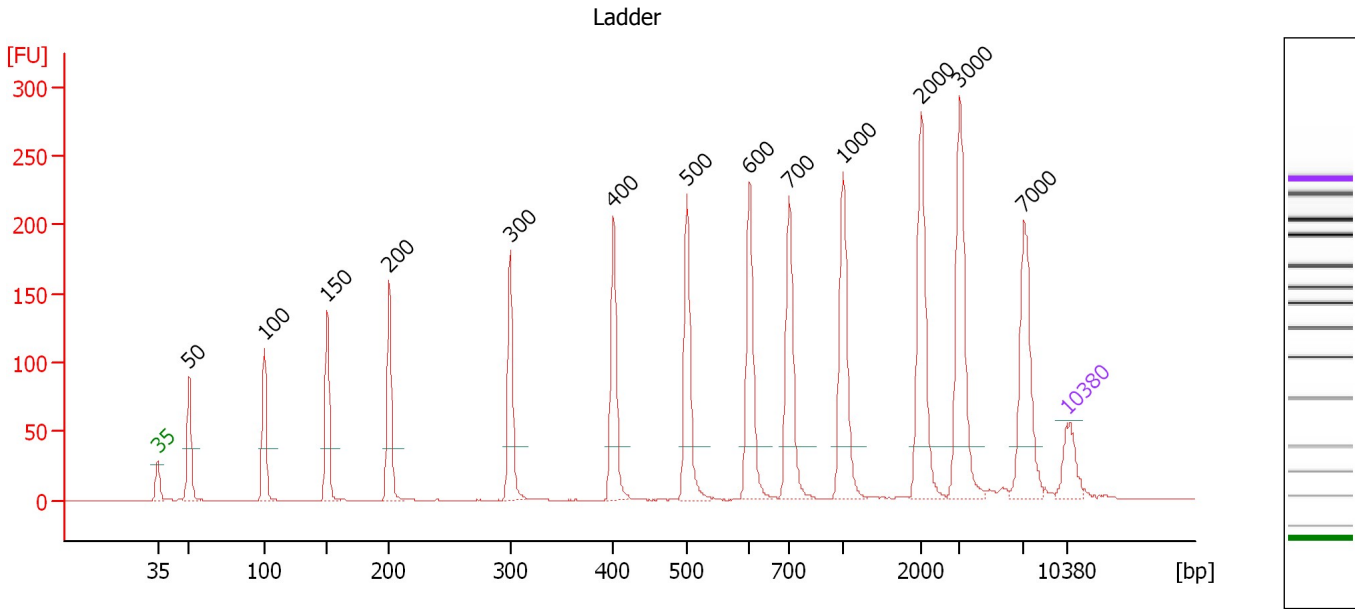
Ladder

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:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
 Modified: 11/5/2015 5:03:51 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

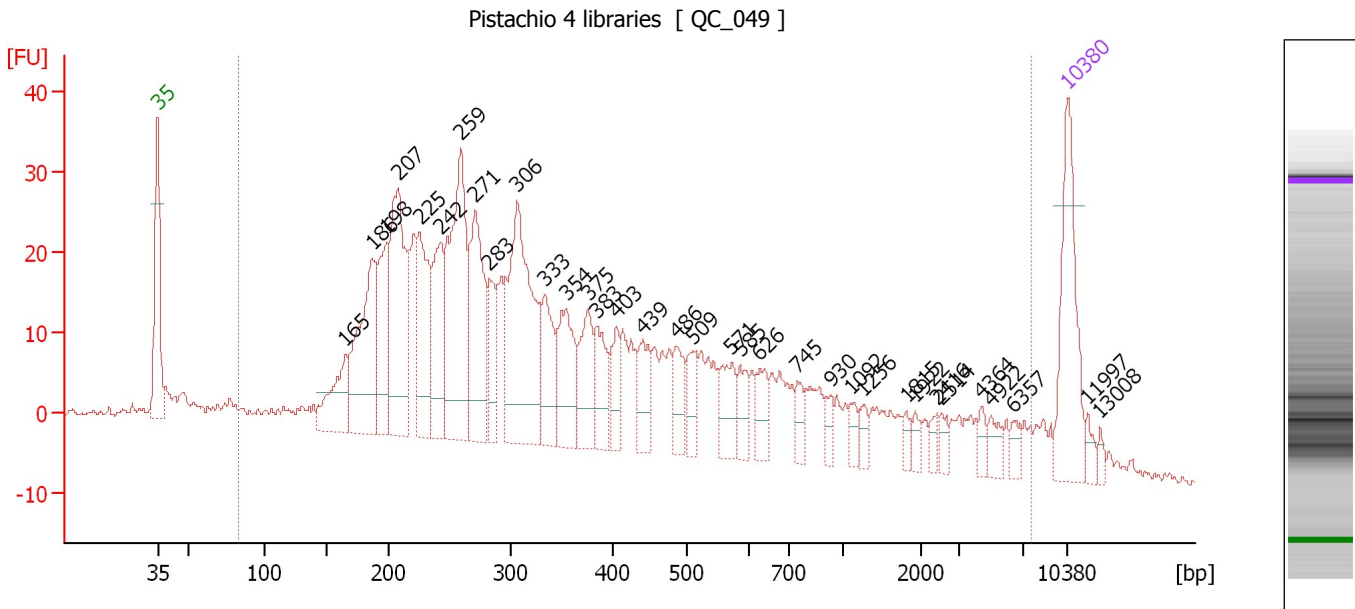
Peak table for Ladder

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	45.42
3	100	150.00	2,272.7	Ladder Peak	51.22
4	150	150.00	1,515.2	Ladder Peak	56.06
5	200	150.00	1,136.4	Ladder Peak	60.85
6	300	150.00	757.6	Ladder Peak	70.17
7	400	150.00	568.2	Ladder Peak	78.11
8	500	150.00	454.5	Ladder Peak	83.78
9	600	150.00	378.8	Ladder Peak	88.57
10	700	150.00	324.7	Ladder Peak	91.63
11	1,000	150.00	227.3	Ladder Peak	95.79
12	2,000	150.00	113.6	Ladder Peak	101.77
13	3,000	150.00	75.8	Ladder Peak	104.78
14	7,000	150.00	32.5	Ladder Peak	109.71
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
 Modified: 11/5/2015 5:03:51 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Pistachio 4 libraries

Number of peaks found: 34 Corr. Area 1: 1,035.6
 Noise: 0.4

Peak table for sample 9 : Pistachio 4 libraries

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	165	64.92	597.9		57.45
3	186	139.37	1,135.0		59.52
4	198	81.54	624.4		60.65
5	207	160.49	1,173.1		61.53
6	225	98.57	663.1		63.20
7	242	82.07	513.6		64.78
8	259	186.42	1,090.6		66.35
9	271	112.60	629.2		67.48
10	283	44.30	237.4		68.56
11	306	183.58	907.9		70.68
12	333	59.16	269.2		72.79
13	354	64.06	274.2		74.46
14	375	50.85	205.4		76.13
15	383	40.52	160.2		76.77
16	403	24.19	90.9		78.29
17	439	32.90	113.6		80.31
18	486	27.86	86.9		82.96
19	509	25.72	76.6		84.19
20	571	32.23	85.5		87.19
21	585	20.88	54.1		87.83
22	626	21.55	52.2		89.36
23	745	14.94	30.4		92.26
24	930	10.30	16.8		94.81
25	1,092	8.77	12.2		96.34

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
 Modified: 11/5/2015 5:03:51 PM

Electropherogram Summary Continued ...

... Peak table for sample 9 : Pistachio 4 libraries

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,256	8.76	10.6		97.32
27	1,815	6.36	5.3		100.66
28	1,922	7.07	5.6		101.30
29	2,416	6.58	4.1		103.02
30	2,514	8.08	4.9		103.32
31	4,364	8.52	3.0		106.46
32	4,922	10.39	3.2		107.15
33	6,357	7.27	1.7		108.92
34	10,380	75.00	10.9	Upper Marker	113.00
35	11,997	0.00	0.0		114.57
36	13,008	0.00	0.0		115.56

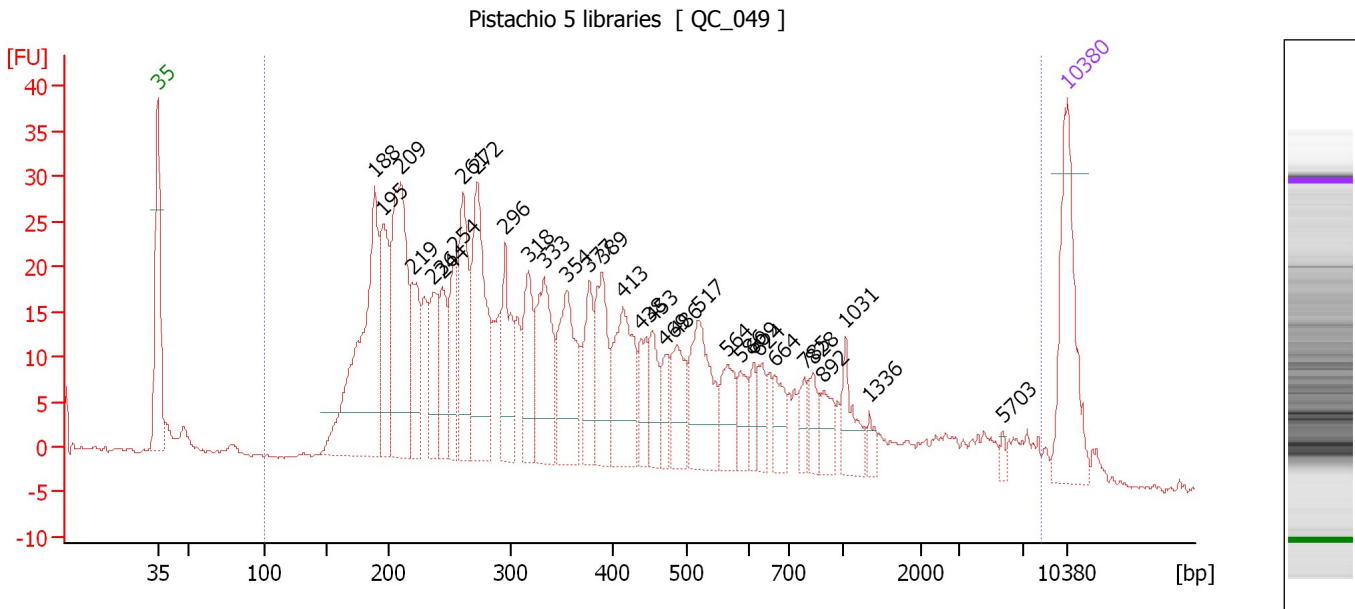
Region table for sample 9 : Pistachio 4 libraries

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ μ l]	% of Total	Size distribution in CV [%]
83	7,500	719	1,035.6	11,782.7	2,191.13	92	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
 Modified: 11/5/2015 5:03:51 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Pistachio 5 libraries

Number of peaks found: 32 Corr. Area 1: 949.5
 Noise: 0.2

Peak table for sample 10 : Pistachio 5 libraries

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	228.62	1,839.3		59.73
3	195	82.40	640.2		60.38
4	209	177.88	1,288.4		61.71
5	219	58.29	402.8		62.65
6	236	50.31	322.7		64.23
7	244	49.82	309.9		64.92
8	254	54.49	325.4		65.86
9	261	89.27	518.0		66.55
10	272	136.09	757.4		67.58
11	296	68.25	349.9		69.76
12	318	59.79	285.1		71.58
13	333	86.18	392.5		72.77
14	354	87.05	372.1		74.50
15	377	46.99	188.9		76.27
16	389	64.58	251.8		77.21
17	413	80.85	296.7		78.84
18	438	29.17	100.9		80.27
19	453	31.53	105.5		81.11
20	469	20.29	65.5		82.05
21	486	37.40	116.6		82.99
22	517	73.94	216.5		84.61
23	564	33.52	90.1		86.84
24	586	19.80	51.2		87.92
25	609	15.91	39.5		88.86

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
 Modified: 11/5/2015 5:03:51 PM

Electropherogram Summary Continued ...

... Peak table for sample 10 : Pistachio 5 libraries

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	624	17.50	42.5		89.30
27	664	22.38	51.0		90.54
28	785	14.40	27.8		92.81
29	828	16.48	30.2		93.40
30	892	21.11	35.9		94.29
31	1,031	28.45	41.8		95.97
32	1,336	8.69	9.9		97.80
33	5,703	4.27	1.1		108.11
34	10,380	75.00	10.9	Upper Marker	113.00

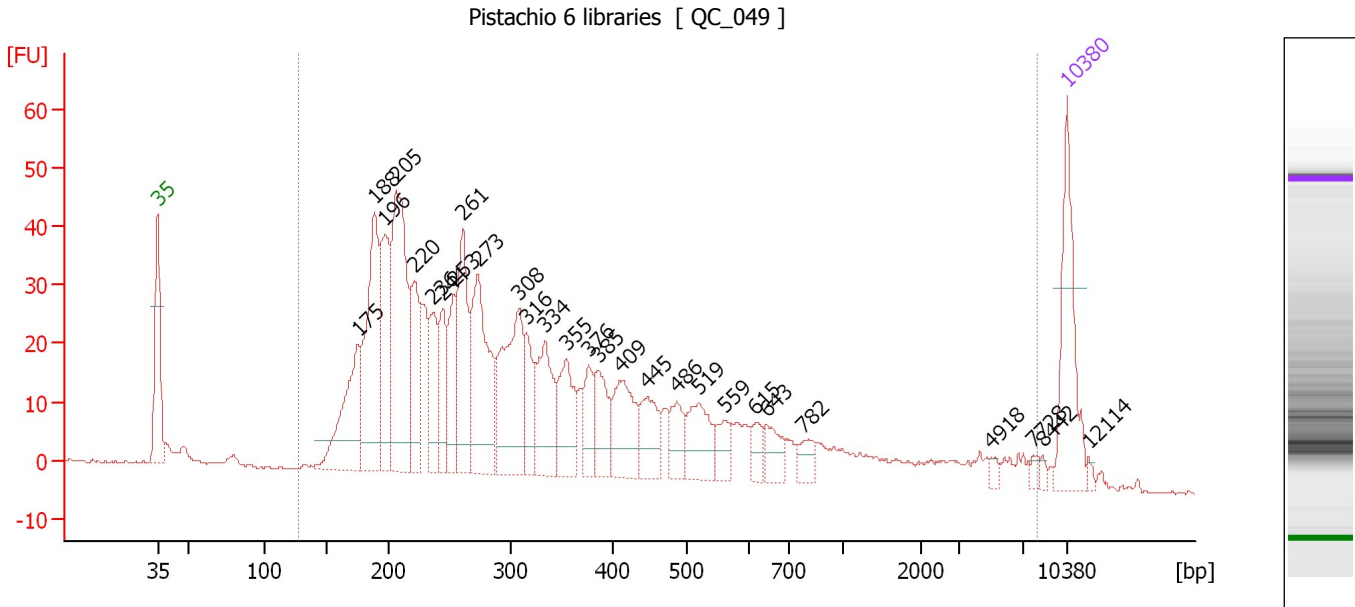
Region table for sample 10 : Pistachio 5 libraries

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
100	8,323	698	949.5	11,017.7	2,193.04	96	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
 Modified: 11/5/2015 5:03:51 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Pistachio 6 libraries

Number of peaks found: 28 Corr. Area 1: 1,104.4
 Noise: 0.2

Peak table for sample 11 : Pistachio 6 libraries

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	175	122.12	1,059.1		58.43
3	188	174.83	1,407.8		59.72
4	196	117.08	903.1		60.51
5	205	215.92	1,592.8		61.36
6	220	80.74	555.3		62.74
7	236	54.21	347.7		64.23
8	244	57.13	355.2		64.93
9	253	55.36	331.1		65.82
10	261	111.65	648.7		66.52
11	273	142.78	792.3		67.66
12	308	138.88	683.9		70.78
13	316	41.85	200.8		71.43
14	334	77.21	350.3		72.87
15	355	62.74	268.1		74.50
16	376	33.45	134.9		76.19
17	385	43.69	171.9		76.93
18	409	67.00	248.3		78.62
19	445	42.77	145.7		80.65
20	486	29.51	92.0		82.99
21	519	51.21	149.6		84.67
22	559	21.45	58.1		86.61
23	615	16.57	40.8		89.04
24	643	23.79	56.1		89.88
25	782	16.83	32.6		92.76

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
 Modified: 11/5/2015 5:03:51 PM

Electropherogram Summary Continued ...

... Peak table for sample 11 : Pistachio 6 libraries

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	4,918	4.65	1.4		107.15
27	7,728	5.38	1.1		110.42
28	8,442	3.50	0.6		111.11
29	10,380	75.00	10.9	Upper Marker	113.00
30	12,114	0.00	0.0		114.69

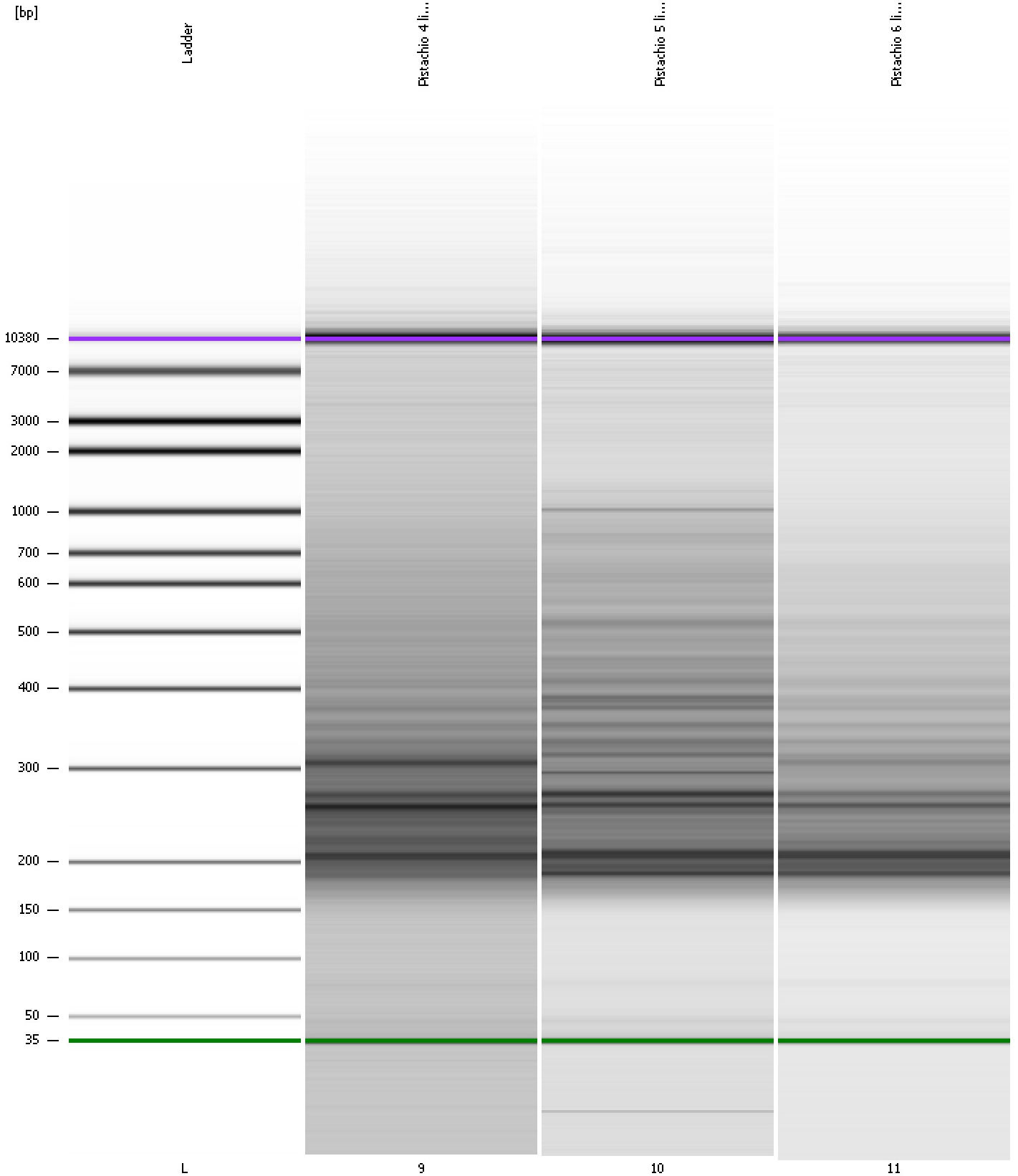
Region table for sample 11 : Pistachio 6 libraries

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
127	7,991	608	1,104.4	11,449.6	2,084.60	96	100.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
Modified: 11/5/2015 5:03:51 PM

Gel Image

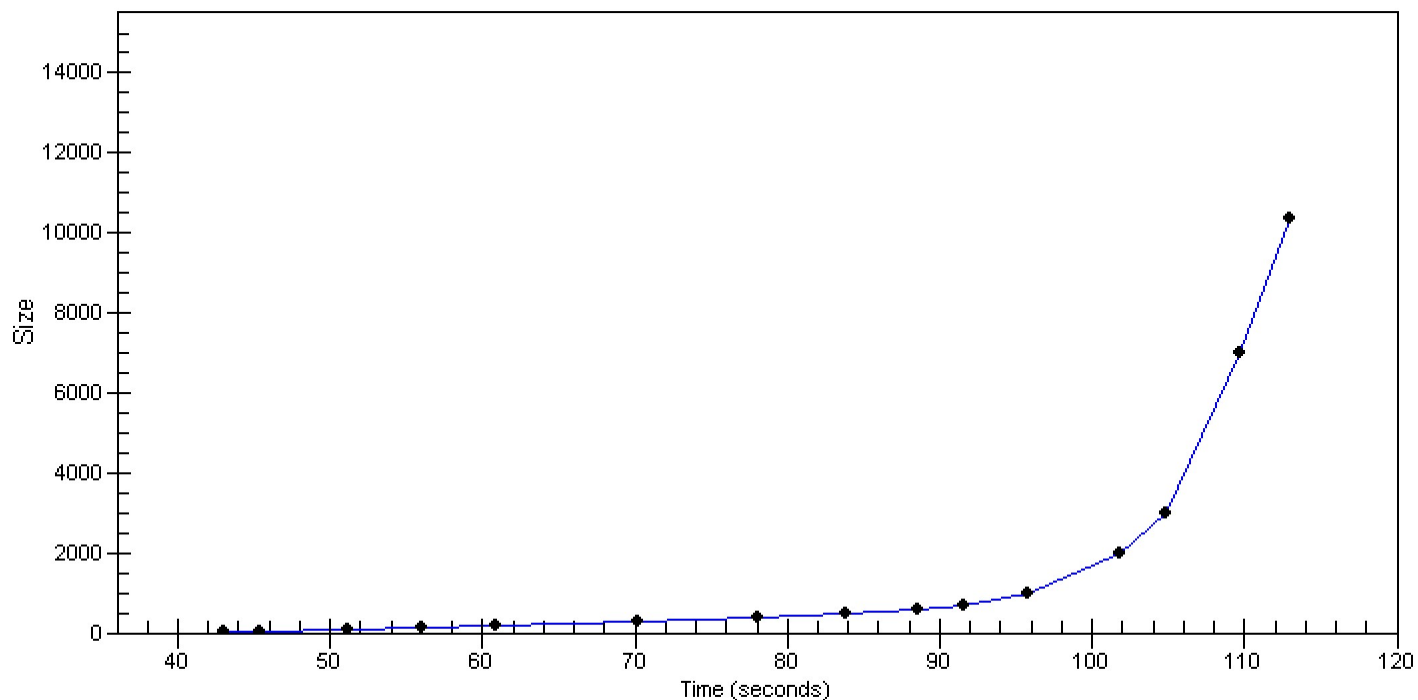


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad

Created: 11/5/2015 4:04:34 PM
Modified: 11/5/2015 5:03:51 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay Created: 11/5/2015 4:04:34 PM
 Data Path: C:\...d Settings\Bioanalyzer\2015-11-05\2015-11-05_005_QC_049.xad Modified: 11/5/2015 5:03:51 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		11/5/2015 12:45:02 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-11-05\2015-11-05_005.xad)		Instrument	Run		11/5/2015 12:04:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/5/2015 12:04:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/5/2015 12:04:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/5/2015 12:04:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/5/2015 12:04:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/5/2015 12:04:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/5/2015 12:04:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1