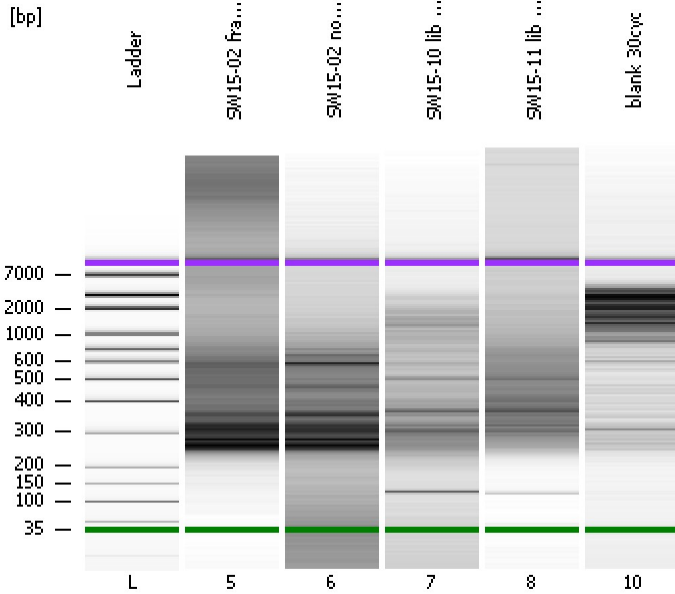


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
Modified: 4/13/2015 12:52:09 PM

Electrophoresis File Run Summary



Instrument Information:

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

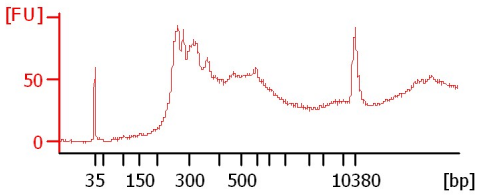
Assay Information:

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

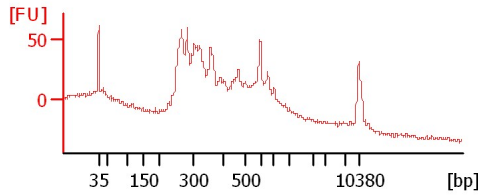
Chip Information:

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

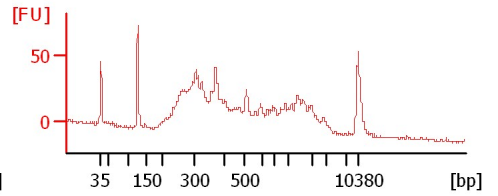
SW15-02 frag lib 14cyc (1:31)



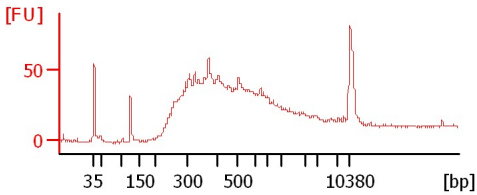
SW15-02 non frag lib 14cyc (1:35)



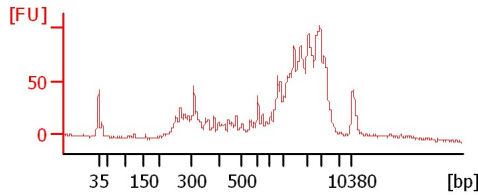
SW15-10 lib 30cyc (1:21)



SW15-11 lib 30cyc (1:37)



blank 30cyc



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
SW15-02 frag lib 14cyc (1:31)		<input type="checkbox"/>	✓			
SW15-02 non frag lib 14cyc (1:35)		<input type="checkbox"/>	✓			
SW15-10 lib 30cyc (1:21)		<input type="checkbox"/>	✓			
SW15-11 lib 30cyc (1:37)		<input type="checkbox"/>	✓			
blank 30cyc		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
Modified: 4/13/2015 12:52:09 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

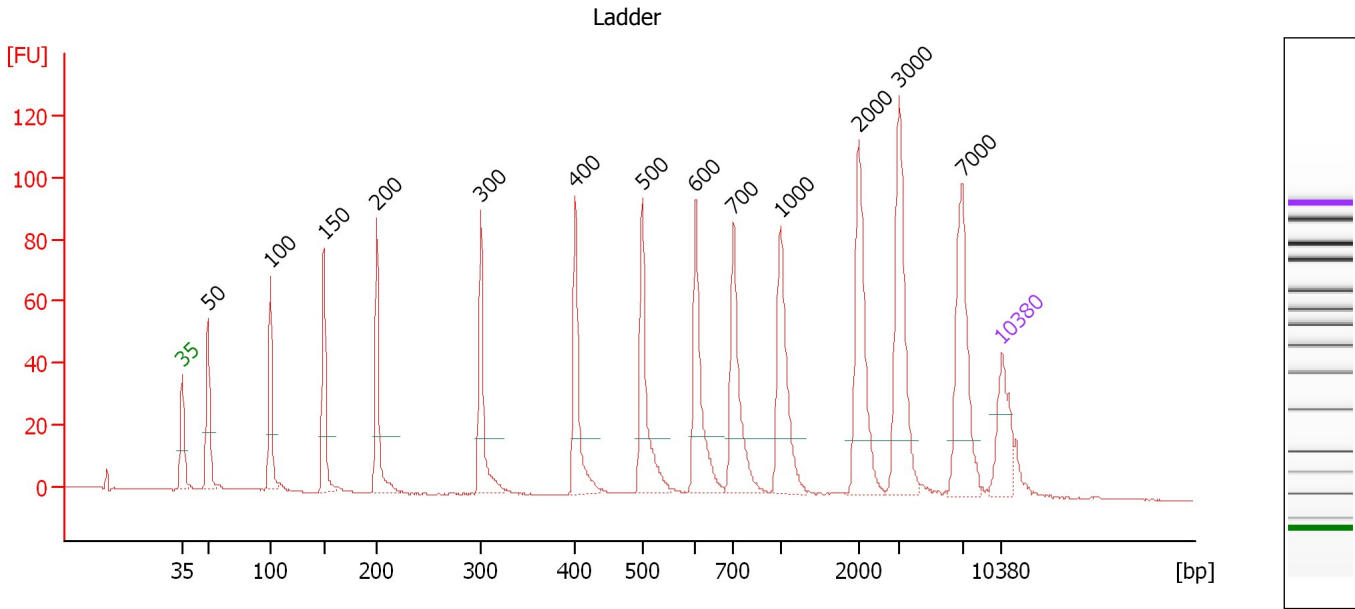
Ladder

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:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

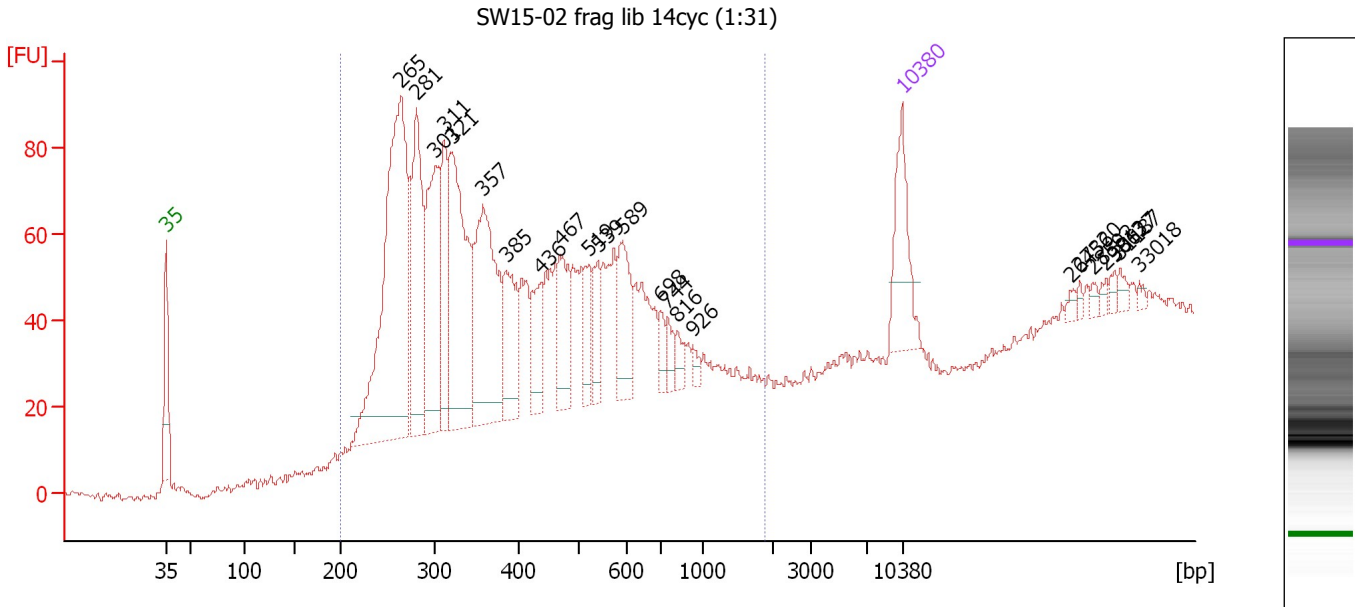
Peak table for Ladder

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	45.23
3	100	150.00	2,272.7	Ladder Peak	50.51
4	150	150.00	1,515.2	Ladder Peak	55.11
5	200	150.00	1,136.4	Ladder Peak	59.62
6	300	150.00	757.6	Ladder Peak	68.50
7	400	150.00	568.2	Ladder Peak	76.57
8	500	150.00	454.5	Ladder Peak	82.30
9	600	150.00	378.8	Ladder Peak	86.86
10	700	150.00	324.7	Ladder Peak	90.09
11	1,000	150.00	227.3	Ladder Peak	94.10
12	2,000	150.00	113.6	Ladder Peak	100.79
13	3,000	150.00	75.8	Ladder Peak	104.26
14	7,000	150.00	32.5	Ladder Peak	109.63
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : SW15-02 frag lib 14cyc (1:31)

Number of peaks found: 23 Corr. Area 1: 1,646.0
 Noise: 0.7

Peak table for sample 5 : SW15-02 frag lib 14cyc (1:31)

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	549.88	3,147.5		65.37
3	281	225.99	1,217.4		66.84
4	301	204.62	1,030.8		68.57
5	311	124.85	607.4		69.43
6	321	270.39	1,276.7		70.19
7	357	262.45	1,112.7		73.13
8	385	103.43	407.0		75.36
9	436	61.81	214.5		78.66
10	467	82.82	268.5		80.43
11	519	42.92	125.3		83.17
12	539	41.49	116.6		84.09
13	589	81.11	208.6		86.37
14	698	19.86	43.1		90.02
15	744	19.68	40.1		90.68
16	816	15.88	29.5		91.64
17	926	8.44	13.8		93.12
18	10,380	75.00	10.9	Upper Marker	113.00
19	26,456	0.00	0.0		129.03
20	27,320	0.00	0.0		129.89
21	28,592	0.00	0.0		131.16
22	29,813	0.00	0.0		132.38
23	30,627	0.00	0.0		133.19
24	31,187	0.00	0.0		133.75
25	33,018	0.00	0.0		135.57

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary Continued ...

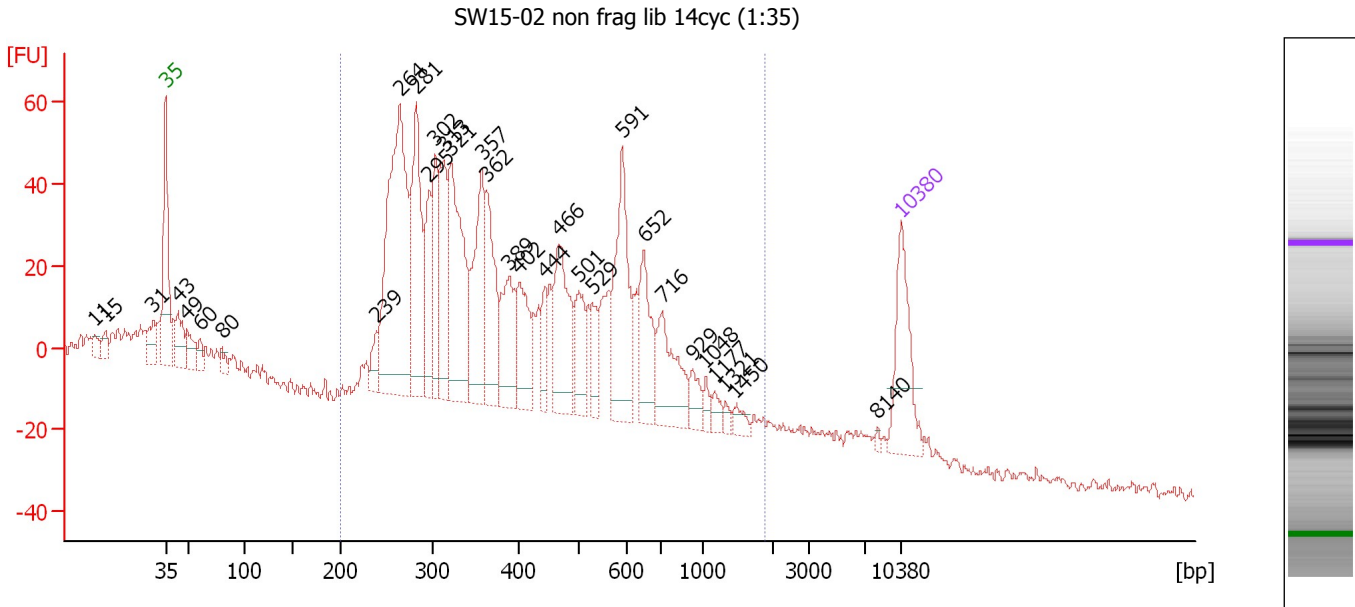
... Region table for sample 5 : SW15-02 frag lib 14cyc (1:31)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	416	1,876	1,646.0	11,287.7	96	43.2	2,588.58	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\BIOANALYZER\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : SW15-02 non frag lib 14cyc (1:35)

Number of peaks found: 31 Corr. Area 1: 1,516.7
 Noise: 1.4

Peak table for sample 6 : SW15-02 non frag lib 14cyc (1:35)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	11	0.00	0.0		36.20
2	15	0.00	0.0		37.26
3	31	0.00	0.0		41.78
4	35	125.00	5,411.3	Lower Marker	43.00
5	43	51.12	1,807.6		44.17
6	49	36.45	1,135.1		45.03
7	60	17.26	438.6		46.25
8	80	15.17	288.0		48.38
9	239	26.96	171.2		63.05
10	264	370.22	2,126.8		65.28
11	281	176.37	949.5		66.86
12	295	77.79	399.3		68.08
13	302	83.58	419.0		68.69
14	313	108.81	526.8		69.55
15	321	207.23	979.7		70.16
16	357	134.74	571.8		73.10
17	362	103.46	432.9		73.51
18	389	85.68	333.6		75.69
19	402	72.86	274.9		76.65
20	444	32.97	112.5		79.09
21	466	115.43	375.2		80.36
22	501	53.88	163.0		82.34
23	529	35.45	101.6		83.61
24	591	138.01	353.8		86.45
25	652	77.67	180.5		88.53

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary Continued ...

... Peak table for sample 6 : SW15-02 non frag lib 14cyc (1:35)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	716	86.77	183.5		90.31
27	929	20.32	33.1		93.15
28	1,048	10.94	15.8		94.42
29	1,177	10.58	13.6		95.28
30	1,321	5.81	6.7		96.25
31	1,450	10.89	11.4		97.11
32	8,140	2.61	0.5		110.77
33	10,380	75.00	10.9	Upper Marker	113.00

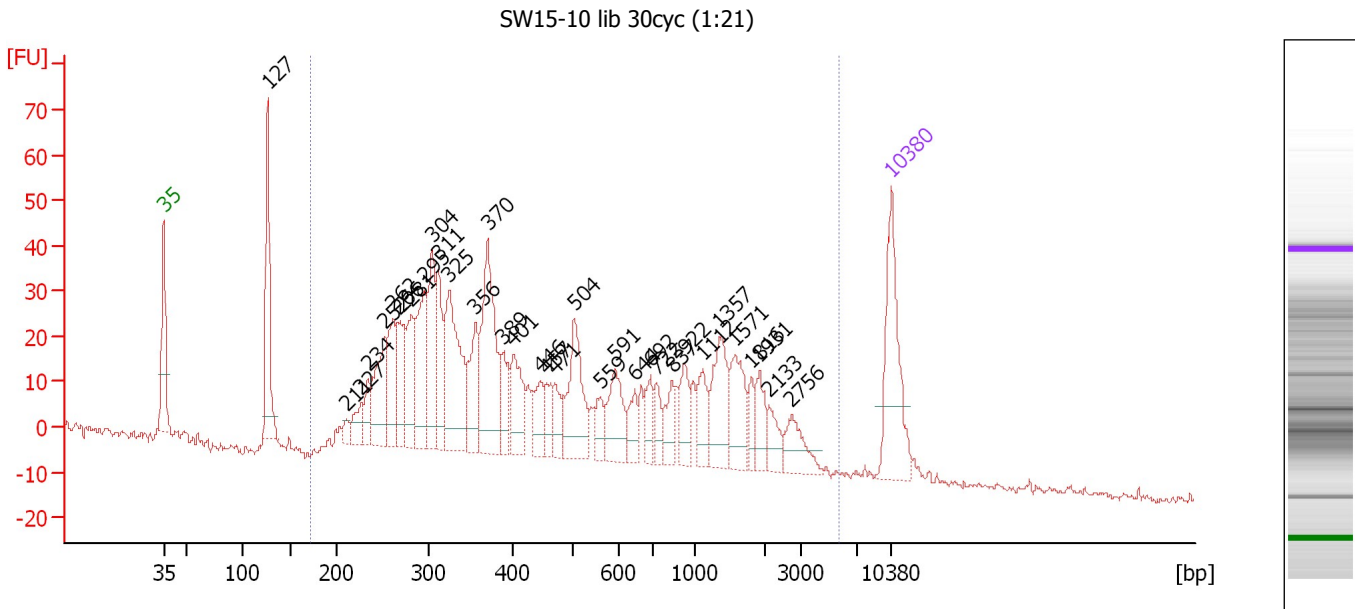
Region table for sample 6 : SW15-02 non frag lib 14cyc (1:35)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	461	1,890	1,516.7	9,021.2	88	51.4	2,178.69	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : SW15-10 lib 30cyc (1:21)

Number of peaks found: 34 Corr. Area 1: 1,139.0
 Noise: 0.8

Peak table for sample 7 : SW15-10 lib 30cyc (1:21)

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	127	118.80	1,417.2		53.00
3	211	9.66	69.4		60.59
4	227	23.47	156.6		62.03
5	234	22.07	142.9		62.64
6	252	72.26	433.7		64.28
7	262	60.37	349.5		65.10
8	266	47.59	270.8		65.51
9	281	60.51	325.9		66.85
10	295	85.55	439.1		68.08
11	304	71.91	358.1		68.85
12	311	58.52	284.9		69.41
13	325	124.85	582.7		70.49
14	356	53.41	227.5		73.00
15	370	128.84	527.0		74.18
16	389	31.26	121.8		75.67
17	401	50.09	189.1		76.64
18	446	31.07	105.5		79.21
19	457	19.49	64.7		79.82
20	471	24.16	77.7		80.64
21	504	75.45	226.8		82.49
22	559	18.80	51.0		85.00
23	591	46.11	118.3		86.44
24	644	20.83	49.0		88.28
25	692	22.59	49.5		89.82

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad


Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary Continued ...

... Peak table for sample 7 : SW15-10 lib 30cyc (1:21)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	722	18.12	38.0		90.38
27	837	24.76	44.8		91.92
28	922	26.92	44.3		93.05
29	1,112	27.51	37.5		94.85
30	1,357	51.31	57.3		96.49
31	1,571	42.38	40.9		97.92
32	1,816	13.18	11.0		99.56
33	1,931	22.65	17.8		100.33
34	2,133	16.32	11.6		101.26
35	2,756	26.79	14.7		103.41
36	10,380	75.00	10.9	Upper Marker	113.00

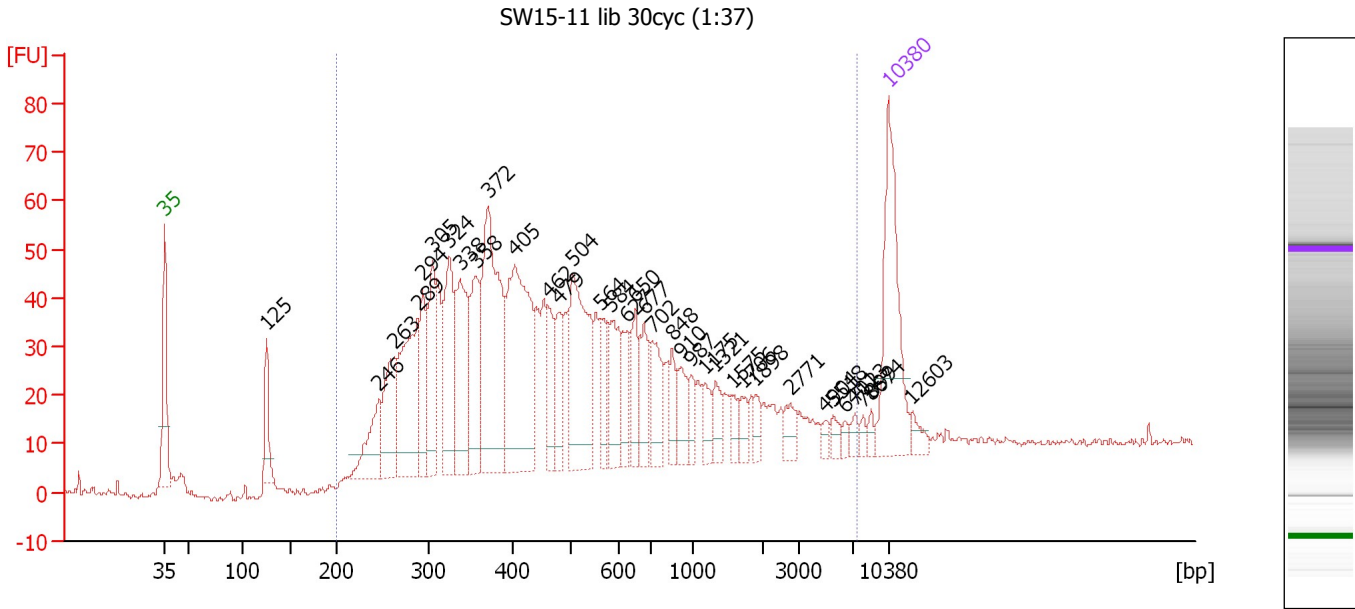
Region table for sample 7 : SW15-10 lib 30cyc (1:21)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
172	747	5,688	1,139.0	5,846.0	93	92.7	1,541.87	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

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 Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : SW15-11 lib 30cyc (1:37)

Number of peaks found: 36 Corr. Area 1: 1,467.2
 Noise: 0.8

Peak table for sample 8 : SW15-11 lib 30cyc (1:37)

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	125	35.14	424.9		52.85
3	246	47.00	289.3		63.72
4	263	60.49	348.5		65.22
5	289	112.17	589.0		67.48
6	294	45.44	234.4		67.95
7	305	63.48	315.1		68.93
8	324	79.68	372.1		70.47
9	338	85.76	384.6		71.56
10	358	62.47	264.6		73.15
11	372	158.10	644.4		74.29
12	405	151.38	566.0		76.87
13	462	29.15	95.6		80.11
14	479	34.70	109.8		81.09
15	504	105.67	317.7		82.48
16	564	24.05	64.6		85.22
17	584	43.09	111.7		86.14
18	627	22.61	54.6		87.74
19	650	30.35	70.8		88.46
20	677	28.52	63.9		89.34
21	702	33.56	72.5		90.11
22	848	15.98	28.5		92.07
23	910	21.63	36.0		92.90
24	987	12.25	18.8		93.93
25	1,175	14.18	18.3		95.27

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary Continued ...

... Peak table for sample 8 : SW15-11 lib 30cyc (1:37)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,321	13.40	15.4		96.25
27	1,575	7.63	7.3		97.95
28	1,706	10.01	8.9		98.82
29	1,898	7.92	6.3		100.11
30	2,771	10.62	5.8		103.46
31	4,904	4.38	1.4		106.81
32	5,518	6.29	1.7		107.64
33	6,401	3.85	0.9		108.82
34	7,123	5.32	1.1		109.75
35	7,899	3.88	0.7		110.53
36	8,674	3.97	0.7		111.30
37	10,380	75.00	10.9	Upper Marker	113.00
38	12,603	0.00	0.0		115.22

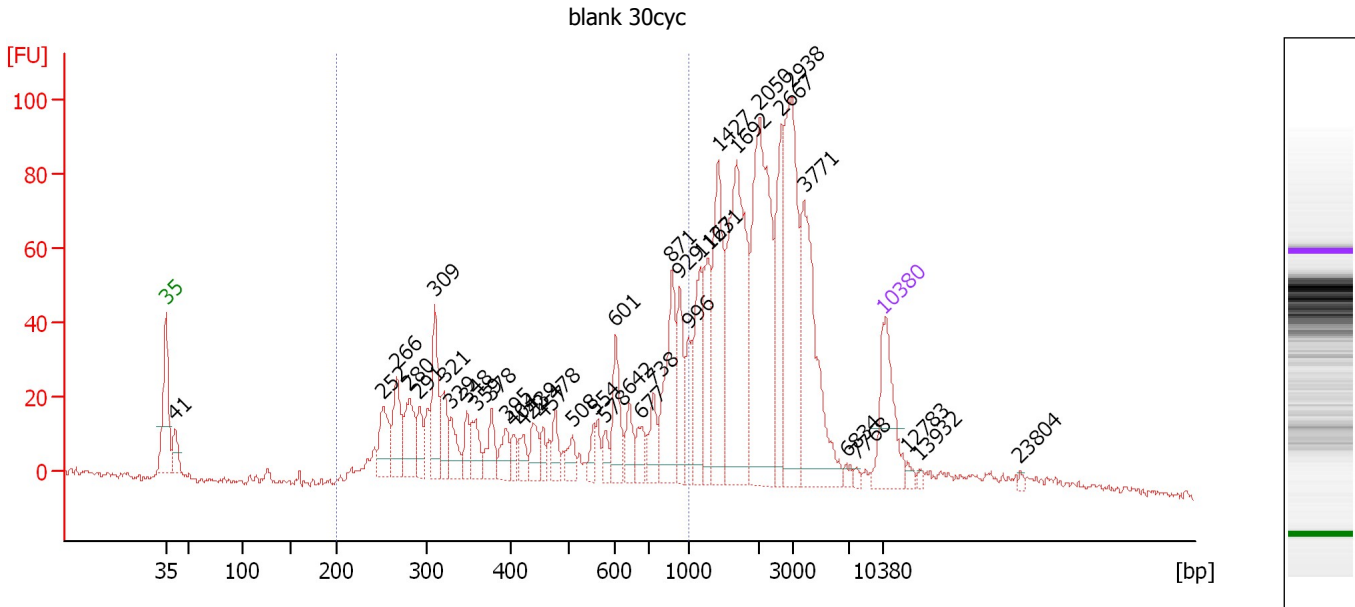
Region table for sample 8 : SW15-11 lib 30cyc (1:37)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	767	7,336	1,467.2	5,677.1	95	100.0	1,565.06	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

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Electropherogram Summary Continued ...



Overall Results for sample 10 : blank 30cyc

Number of peaks found: 40 Corr. Area 1: 685.0
 Noise: 1.0

Peak table for sample 10 : blank 30cyc

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	41	37.72	1,395.6		43.89
3	252	58.44	352.0		64.20
4	266	68.14	387.9		65.50
5	280	64.63	350.2		66.70
6	291	33.08	172.0		67.74
7	309	79.26	388.3		69.25
8	321	40.60	191.7		70.19
9	329	35.23	162.1		70.86
10	348	26.83	116.8		72.38
11	359	33.88	143.0		73.26
12	378	35.80	143.6		74.77
13	395	27.95	107.1		76.18
14	404	17.42	65.3		76.80
15	422	19.88	71.3		77.84
16	439	29.10	100.5		78.78
17	457	16.08	53.3		79.82
18	478	25.87	82.1		81.02
19	508	19.85	59.1		82.69
20	554	16.59	45.4		84.77
21	578	16.07	42.1		85.86
22	601	52.28	131.7		86.91
23	642	28.77	67.9		88.21
24	677	23.53	52.6		89.35
25	738	31.88	65.4		90.60

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad


Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 PM

Electropherogram Summary Continued ...

... Peak table for sample 10 : blank 30cyc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	871	98.08	170.6		92.38
27	929	53.75	87.6		93.16
28	996	35.85	54.6		94.04
29	1,163	73.21	95.4		95.19
30	1,271	61.79	73.6		95.92
31	1,427	122.99	130.6		96.96
32	1,692	222.11	198.9		98.73
33	2,050	231.29	170.9		100.97
34	2,667	91.94	52.2		103.10
35	2,938	171.24	88.3		104.04
36	3,771	160.21	64.4		105.29
37	6,834	5.96	1.3		109.41
38	7,768	3.72	0.7		110.40
39	10,380	75.00	10.9	Upper Marker	113.00
40	12,783	0.00	0.0		115.40
41	13,932	0.00	0.0		116.54
42	23,804	0.00	0.0		126.39

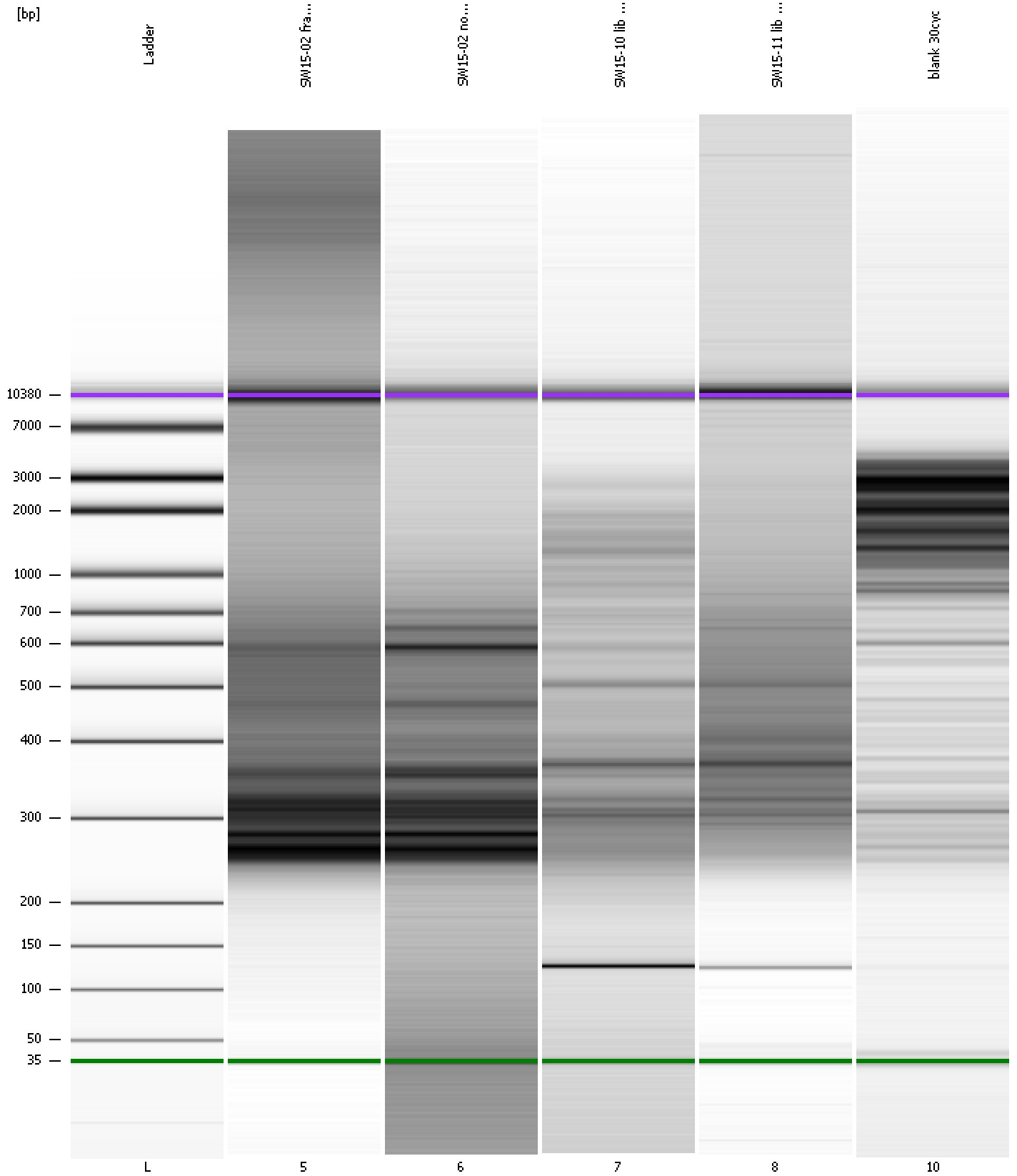
Region table for sample 10 : blank 30cyc

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	527	1,000	685.0	4,244.8	40	44.4	1,115.54	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
Modified: 4/13/2015 12:52:09 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ings\Bioanalyzer\2015-04-13\2015-04-13_001_MiSeq109Libs.xad

Created: 4/13/2015 11:37:03 AM
 Modified: 4/13/2015 12:52:09 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		4/13/2015 12:18:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-13\2015-04-13_001.xad)		Instrument	Run		4/13/2015 11:37:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/13/2015 11:37:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/13/2015 11:37:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/13/2015 11:37:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/13/2015 11:37:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/13/2015 11:37:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/13/2015 11:37:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1