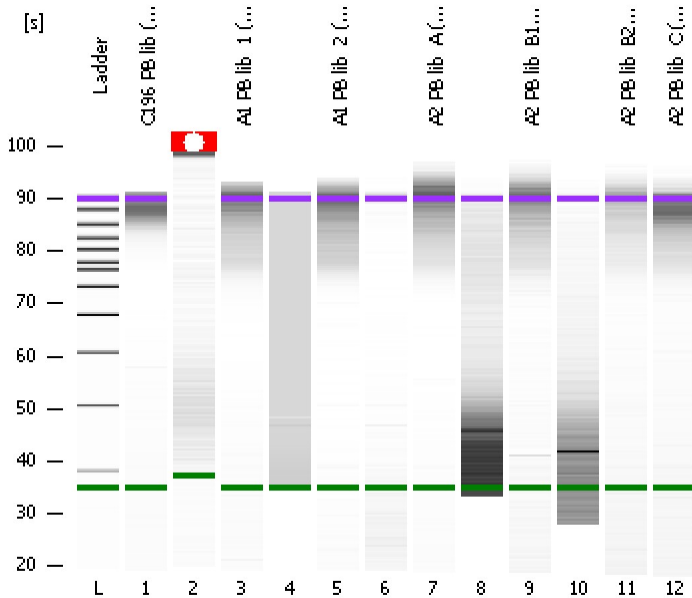


Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
Modified: 12/20/2014 1:46:30 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\DNA 12000 Series II.xsy

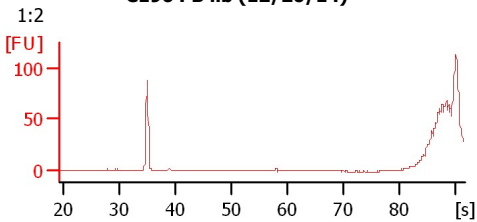
Assay Class: DNA 12000
Version: 2.4
Assay Comments: DNA Analysis 100 -12000 bp

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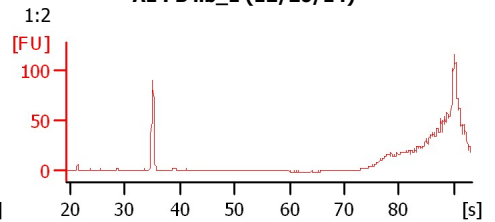
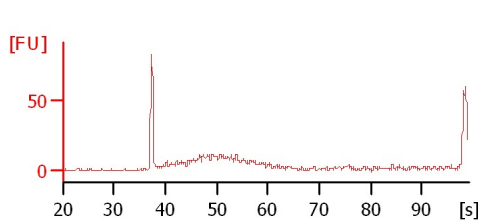
Chip Information:

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

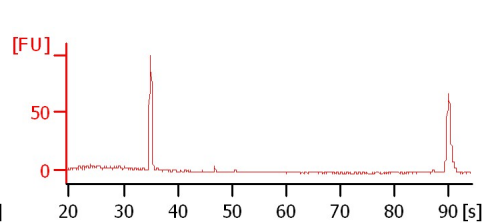
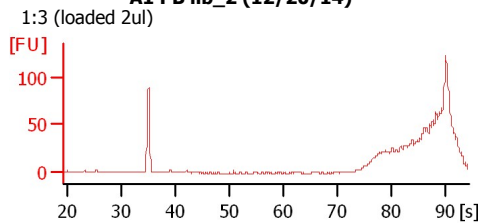
C196 PB lib (12/20/14)



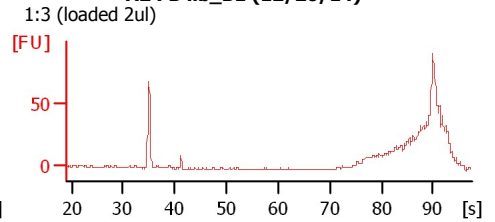
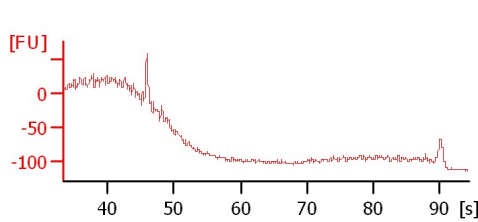
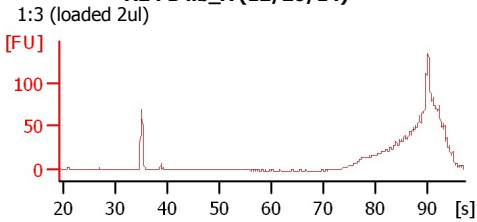
A1 PB lib_1 (12/20/14)



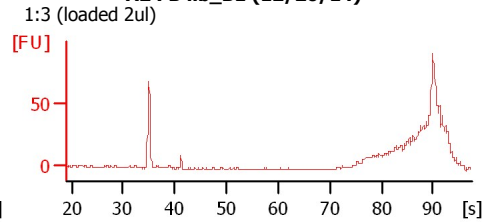
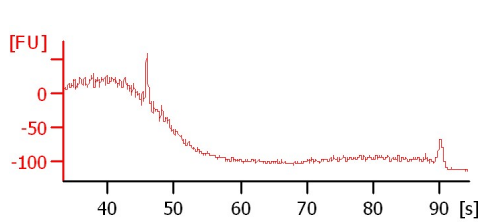
A1 PB lib_2 (12/20/14)



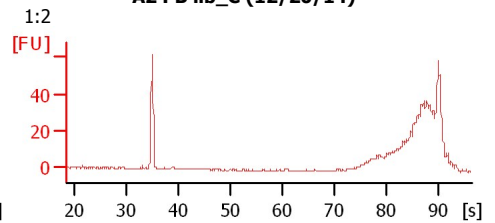
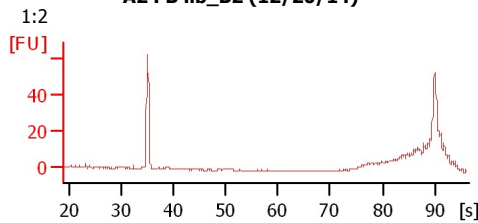
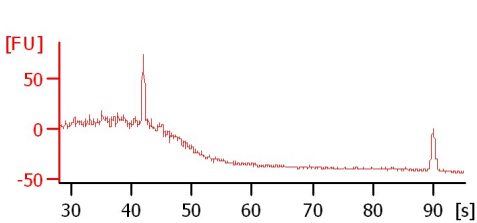
A2 PB lib_A (12/20/14)



A2 PB lib_B1 (12/20/14)



A2 PB lib_B2 (12/20/14)



A2 PB lib_C (12/20/14)

Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
Modified: 12/20/2014 1:46:30 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
C196 PB lib (12/20/14)	1:2	<input type="checkbox"/>				
A1 PB lib_1 (12/20/14)	1:2	<input type="checkbox"/>				
A1 PB lib_2 (12/20/14)	1:3 (loaded 2ul)	<input type="checkbox"/>				
A2 PB lib_A (12/20/14)	1:3 (loaded 2ul)	<input type="checkbox"/>				
A2 PB lib_B1 (12/20/14)	1:3 (loaded 2ul)	<input type="checkbox"/>				
A2 PB lib_B2 (12/20/14)	1:2	<input type="checkbox"/>				
A2 PB lib_C (12/20/14)	1:2	<input type="checkbox"/>				
Ladder		<input type="checkbox"/>				

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
Modified: 12/20/2014 1:46:30 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 13
Minimum Visible Range [s] : 20
Maximum Visible Range [s] : 99
Start Analysis Time Range [s] : 20
End Analysis Time Range [s] : 98.95
Ladder Concentration [ng/μl] : 44
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [ng/μl] : 8.3
Upper Marker Concentration [ng/μl] : 4.2
Used Upper Marker for Quantitation
This is a Qualitative Assay Only
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 20
Integration End Time [s] : 98.95
Slope Threshold : 0.8
Height Threshold [FU] : 20
Area Threshold : 0.1
Width Threshold [s] : 0.5
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

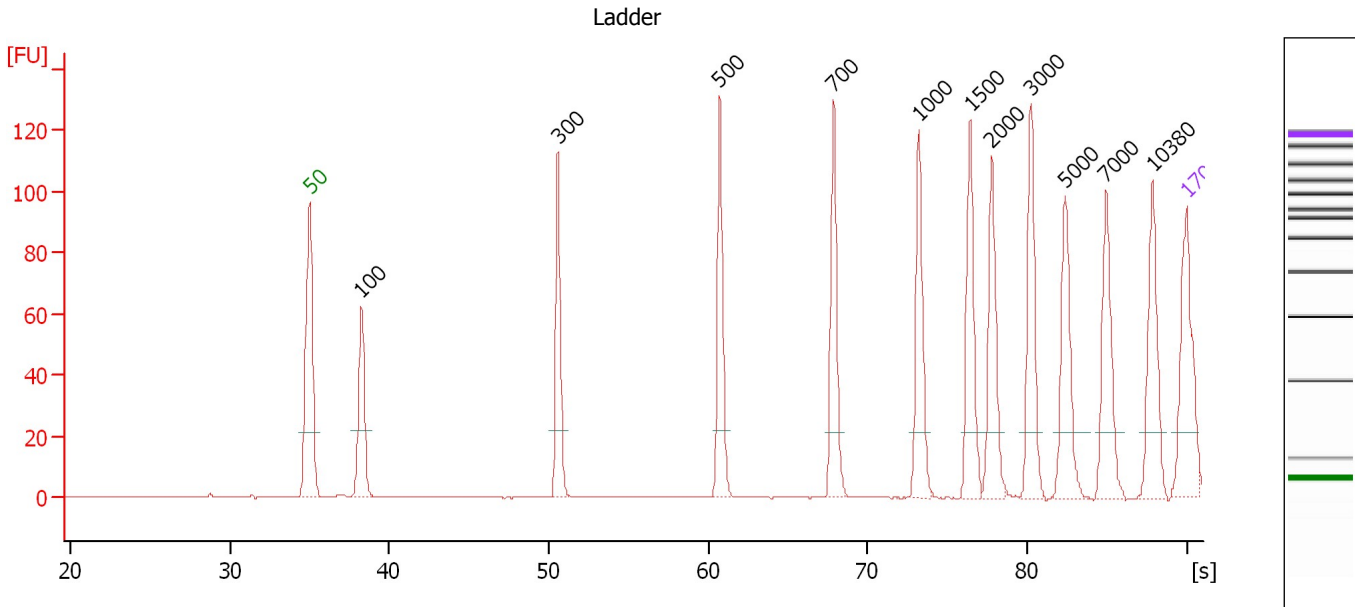
Ladder

Ladder Peak	Size	Area
1	50	120
2	100	48
3	300	61
4	500	77
5	700	81
6	1000	86
7	1500	92
8	2000	92
9	3000	96
10	5000	100
11	7000	98
12	10380	102
13	17000	110

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary



Peak table for Ladder

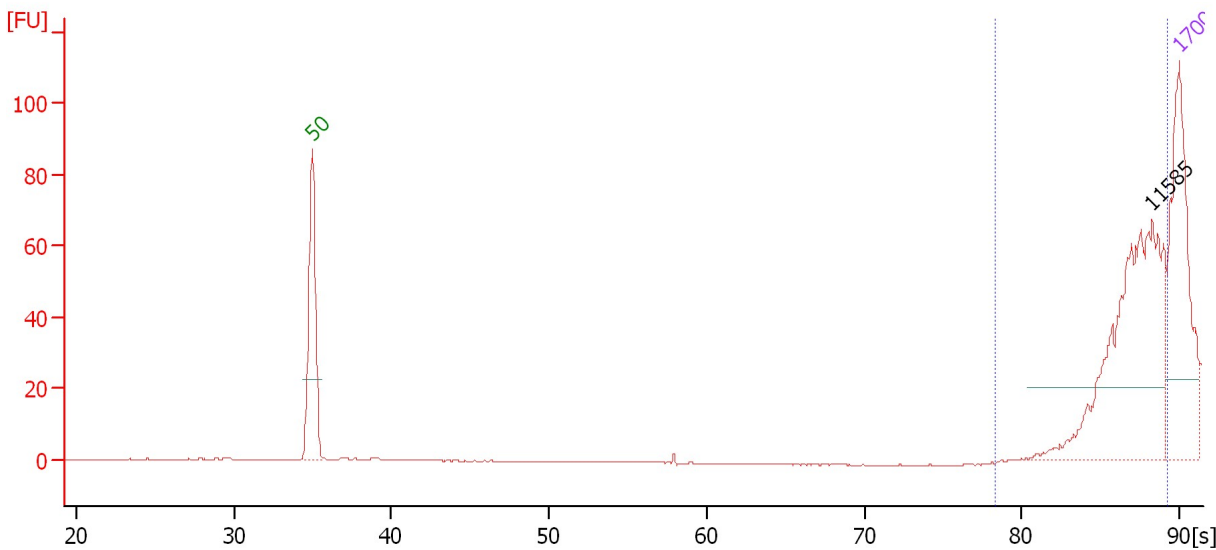
Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	100	4.00	60.6	Ladder Peak
3	300	4.00	20.2	Ladder Peak
4	500	4.00	12.1	Ladder Peak
5	700	4.00	8.7	Ladder Peak
6	1,000	4.00	6.1	Ladder Peak
7	1,500	4.00	4.0	Ladder Peak
8	2,000	4.00	3.0	Ladder Peak
9	3,000	4.00	2.0	Ladder Peak
10	5,000	4.00	1.2	Ladder Peak
11	7,000	4.00	0.9	Ladder Peak
12	10,380	4.00	0.6	Ladder Peak
13	17,000	4.20	0.4	Upper Marker

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...

C196 PB lib (12/20/14) [1:2]



Overall Results for sample 1 : C196 PB lib (12/20/14)

Number of peaks found: 1 Area: 111.4

Peak table for sample 1 : C196 PB lib (12/20/14)

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	11,585	6.79	0.9	
3	17,000	4.20	0.4	Upper Marker

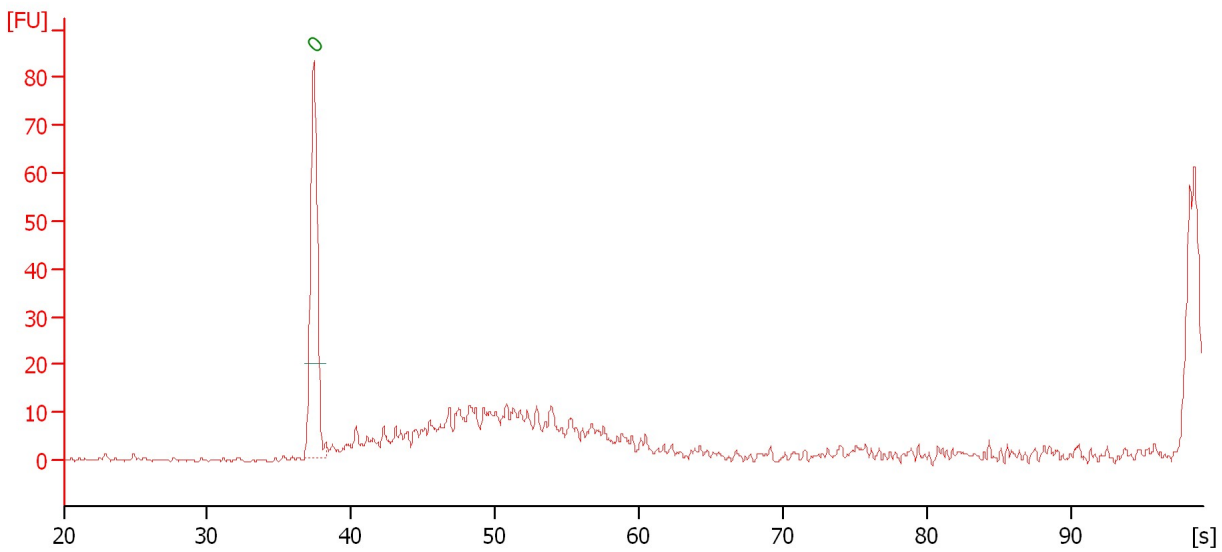
Region table for sample 1 : C196 PB lib (12/20/14)

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
2,199	14,784	10,651	2.94	111.4	100	17.3	Blue

Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : -

Number of peaks found: 0

Peak table for sample 2 : -

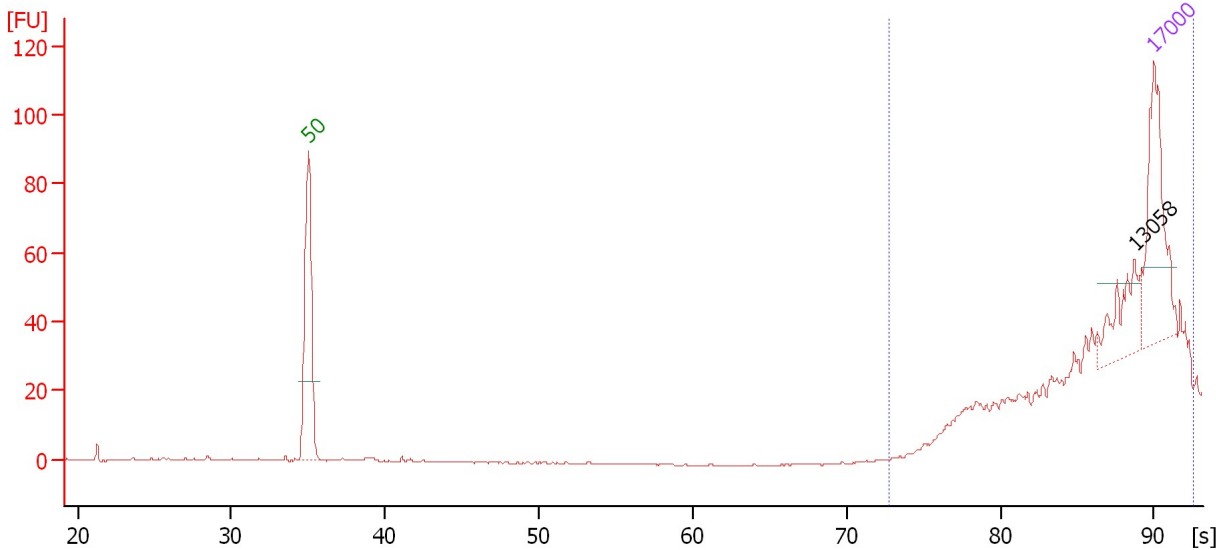
Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	0	0.00	0.0	Lower Marker

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...

A1 PB lib_1 (12/20/14) [1:2]



Overall Results for sample 3 : A1 PB lib 1 (12/20/14)

Number of peaks found: 1 Area: 144.1

Peak table for sample 3 : A1 PB lib 1 (12/20/14)

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	13,058	2.08	0.2	
3	17,000	4.20	0.4	Upper Marker

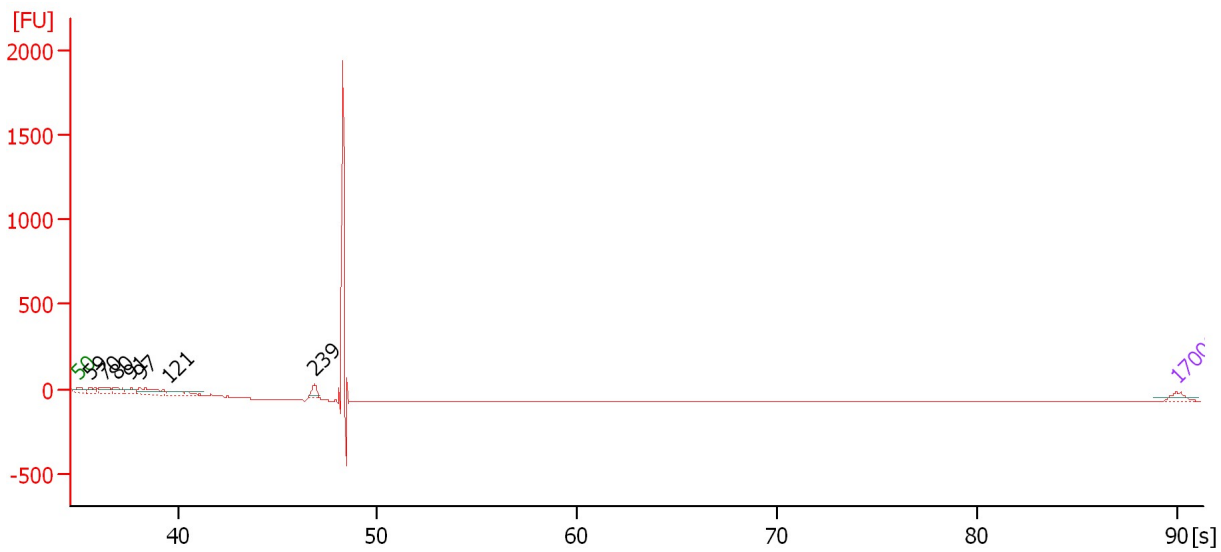
Region table for sample 3 : A1 PB lib 1 (12/20/14)

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
977	25,047	14,432	6.11	144.1	99	34.4	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 :

Number of peaks found: 7

Peak table for sample 4 :

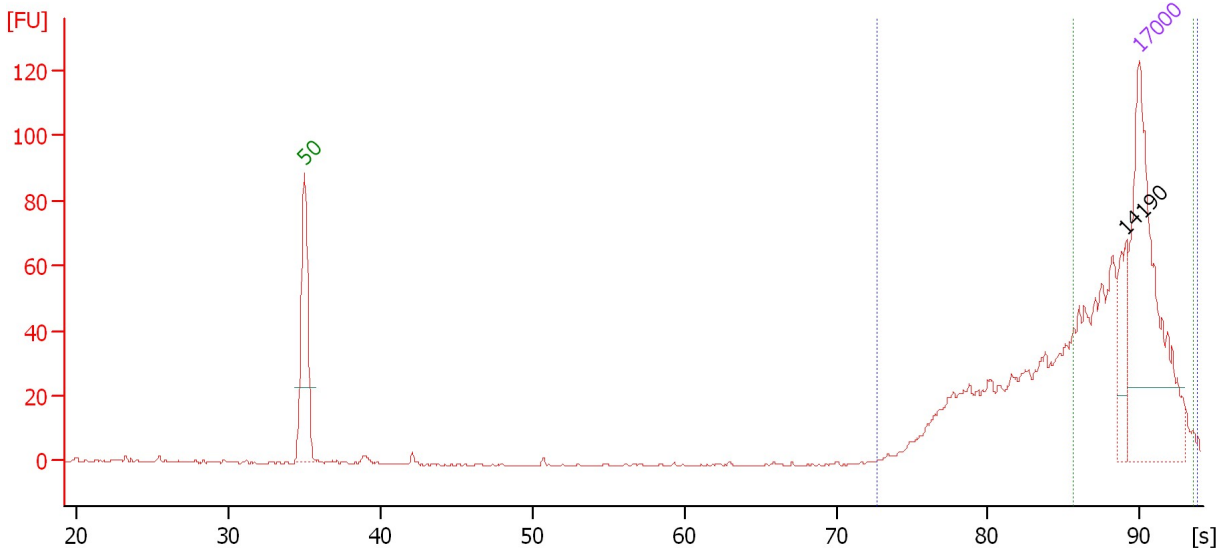
Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	59	2.15	55.4	
3	70	3.39	73.0	
4	80	2.98	56.2	
5	91	3.09	51.5	
6	97	7.02	109.2	
7	121	4.94	62.1	
8	239	3.99	25.3	
9	17,000	4.20	0.4	Upper Marker

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...

A1 PB lib_2 (12/20/14) [1:3 (loaded 2ul)]



Overall Results for sample 5 : A1 PB lib 2 (12/20/14)

Number of peaks found: 1 Area 2: 183.6
 Area 1: 409.7

Peak table for sample 5 : A1 PB lib 2 (12/20/14)

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	14,190	0.80	0.1	
3	17,000	4.20	0.4	Upper Marker

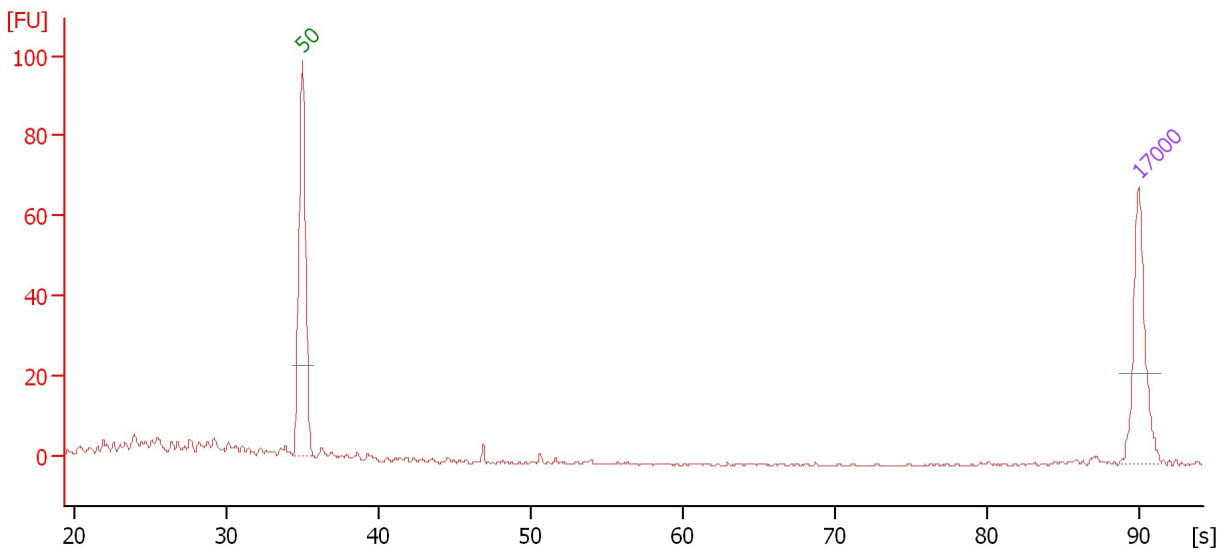
Region table for sample 5 : A1 PB lib 2 (12/20/14)

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
970	28,988	11,393	7.75	409.7	100	58.4	Blue
7,838	28,109	15,195	3.37	183.6	45	32.3	Green

Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 :

Number of peaks found: 0

Peak table for sample 6 :

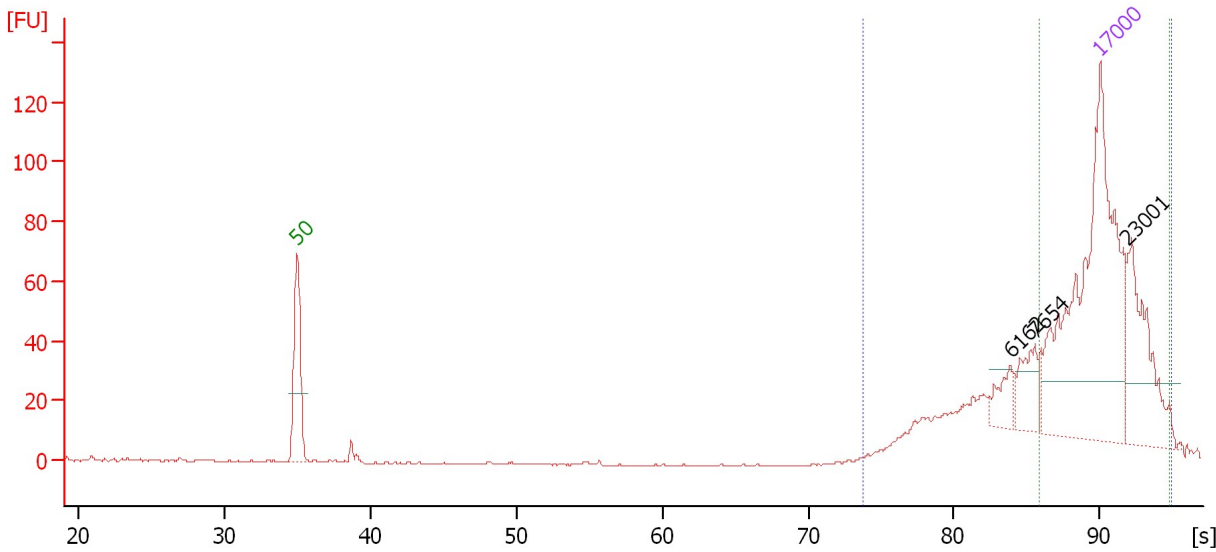
Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	17,000	4.20	0.4	Upper Marker

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...

A2 PB lib_A (12/20/14) [1:3 (loaded 2ul)]



Overall Results for sample 7 : A2 PB lib_A (12/20/14)

Number of peaks found: 2 Area 2: 136.2
 Area 1: 337.9

Peak table for sample 7 : A2 PB lib_A (12/20/14)

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	6,162	0.33	0.1	
3	7,654	0.53	0.1	
4	17,000	4.20	0.4	Upper Marker
5	23,001	0.00	0.0	

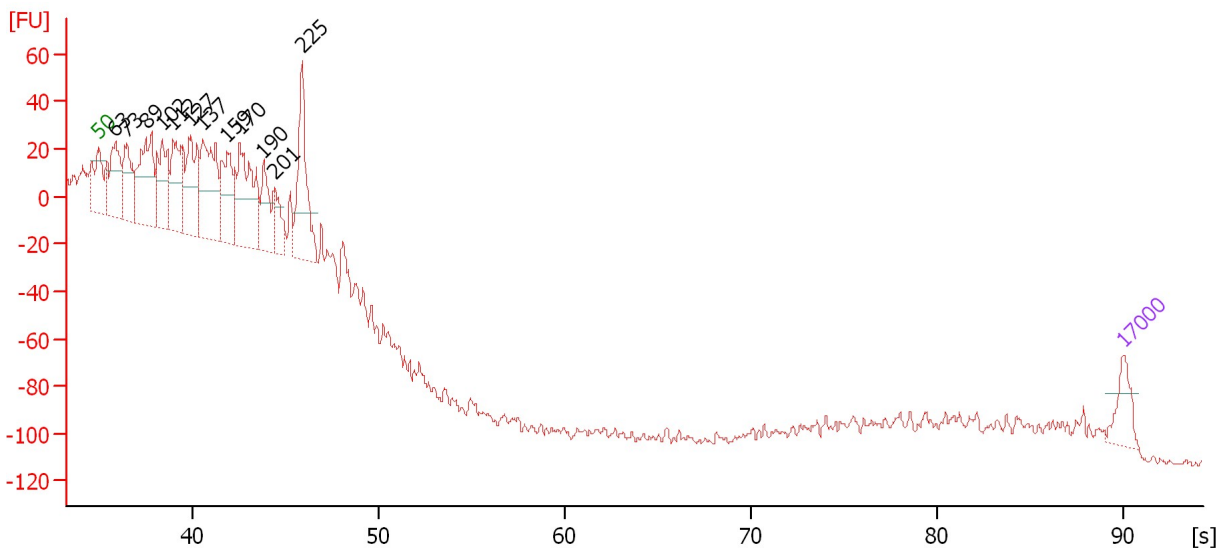
Region table for sample 7 : A2 PB lib_A (12/20/14)

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
1,087	32,313	14,206	4.23	337.9	97	55.6	Blue
8,038	31,871	17,734	1.61	136.2	39	34.2	Green

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 :

Number of peaks found: 12

Peak table for sample 8 :

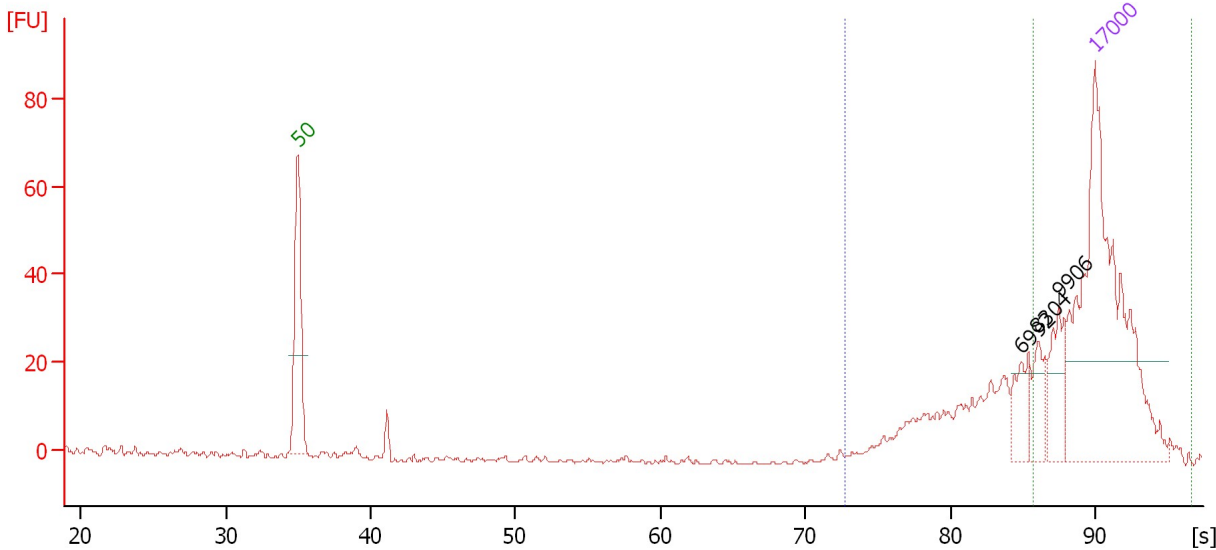
Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	63	5.09	122.4	
3	73	4.60	96.0	
4	89	9.26	158.3	
5	102	5.54	82.4	
6	112	7.62	103.3	
7	127	7.83	93.1	
8	137	11.60	127.8	
9	159	6.26	59.8	
10	170	10.88	96.9	
11	190	5.62	44.8	
12	201	3.00	22.6	
13	225	10.93	73.8	
14	17,000	4.20	0.4	Upper Marker

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...

A2 PB lib_B1 (12/20/14) [1:3 (loaded 2ul)]



Overall Results for sample 9 : A2 PB lib B1 (12/20/14)

Number of peaks found: 3 Area 2: 60.4
 Area 1: 177.1

Peak table for sample 9 : A2 PB lib B1 (12/20/14)

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	6,992	0.46	0.1	
3	8,304	0.48	0.1	
4	9,906	0.67	0.1	
5	17,000	4.20	0.4	Upper Marker

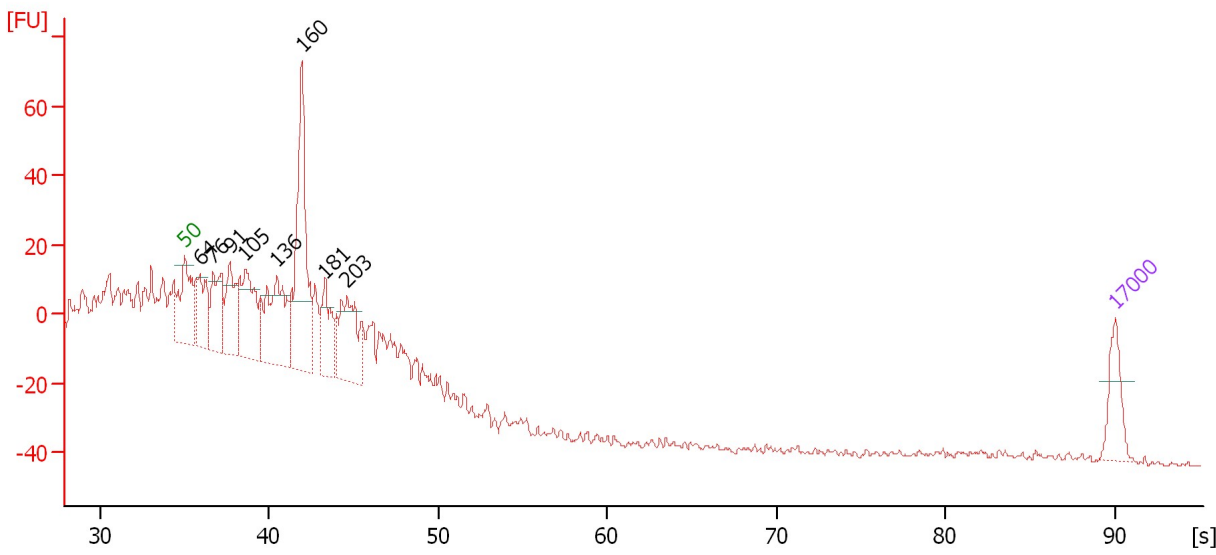
Region table for sample 9 : A2 PB lib B1 (12/20/14)

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
972	37,790	13,649	3.18	177.1	98	55.8	Blue
7,916	37,790	17,172	1.06	60.4	33	34.2	Green

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 :

Number of peaks found: 8

Peak table for sample 10 :

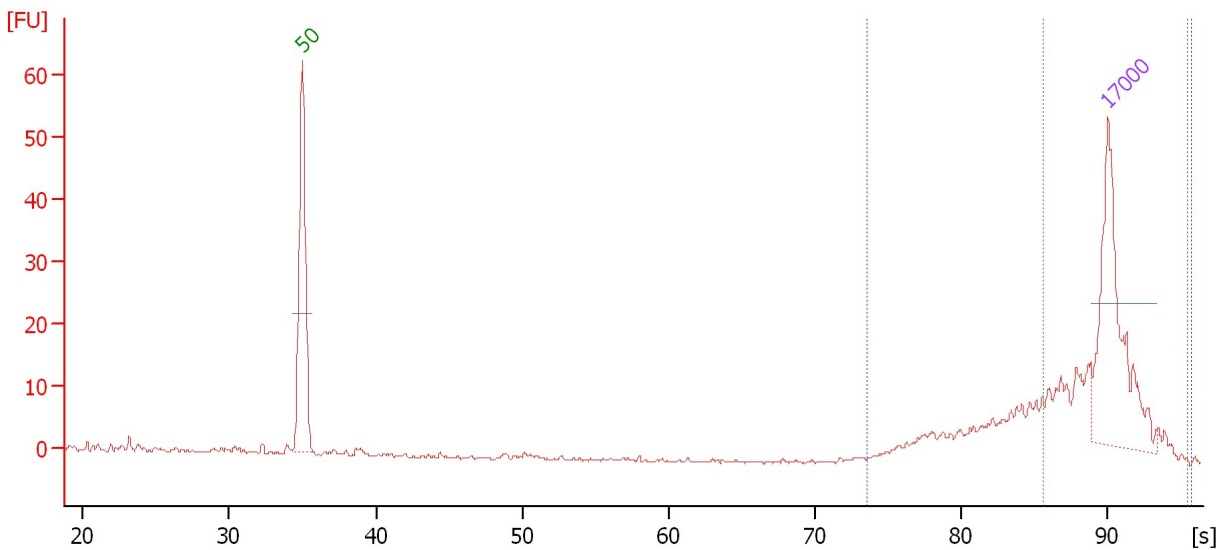
Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	64	3.31	78.6	
3	76	4.43	88.9	
4	91	5.03	83.5	
5	105	7.73	111.3	
6	136	9.08	101.0	
7	160	14.97	142.0	
8	181	4.43	37.1	
9	203	7.86	58.6	
10	17,000	4.20	0.4	Upper Marker

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...

A2 PB lib_B2 (12/20/14) [1:2]



Overall Results for sample 11 : A2 PB lib B2 (12/20/14)

Number of peaks found: 0 Area 2: 45.2
 Area 1: 99.1

Peak table for sample 11 : A2 PB lib B2 (12/20/14)

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	17,000	4.20	0.4	Upper Marker

Region table for sample 11 : A2 PB lib B2 (12/20/14)

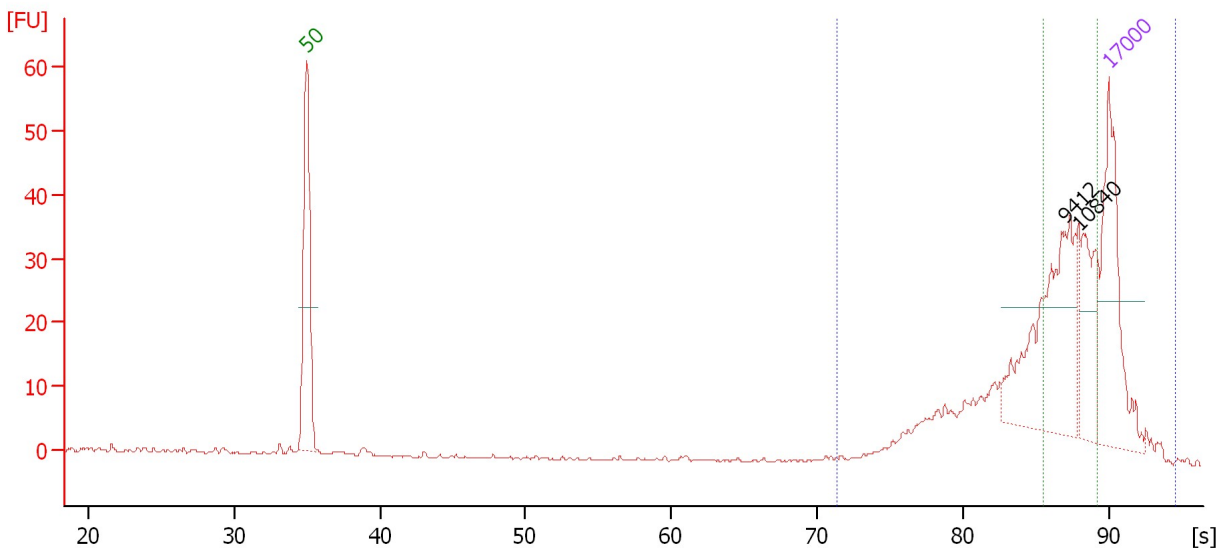
From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
1,040	34,807	13,233	5.33	99.1	99	54.2	Blue
7,791	33,896	16,583	2.36	45.2	45	32.5	Green

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Electropherogram Summary Continued ...

A2 PB lib_C (12/20/14) [1:2]



Overall Results for sample 12 : A2 PB lib_C (12/20/14)

Number of peaks found: 2 Area 2: 122.9
 Area 1: 245.4

Peak table for sample 12 : A2 PB lib_C (12/20/14)

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	9,412	5.89	0.9	
3	10,840	2.28	0.3	
4	17,000	4.20	0.4	Upper Marker

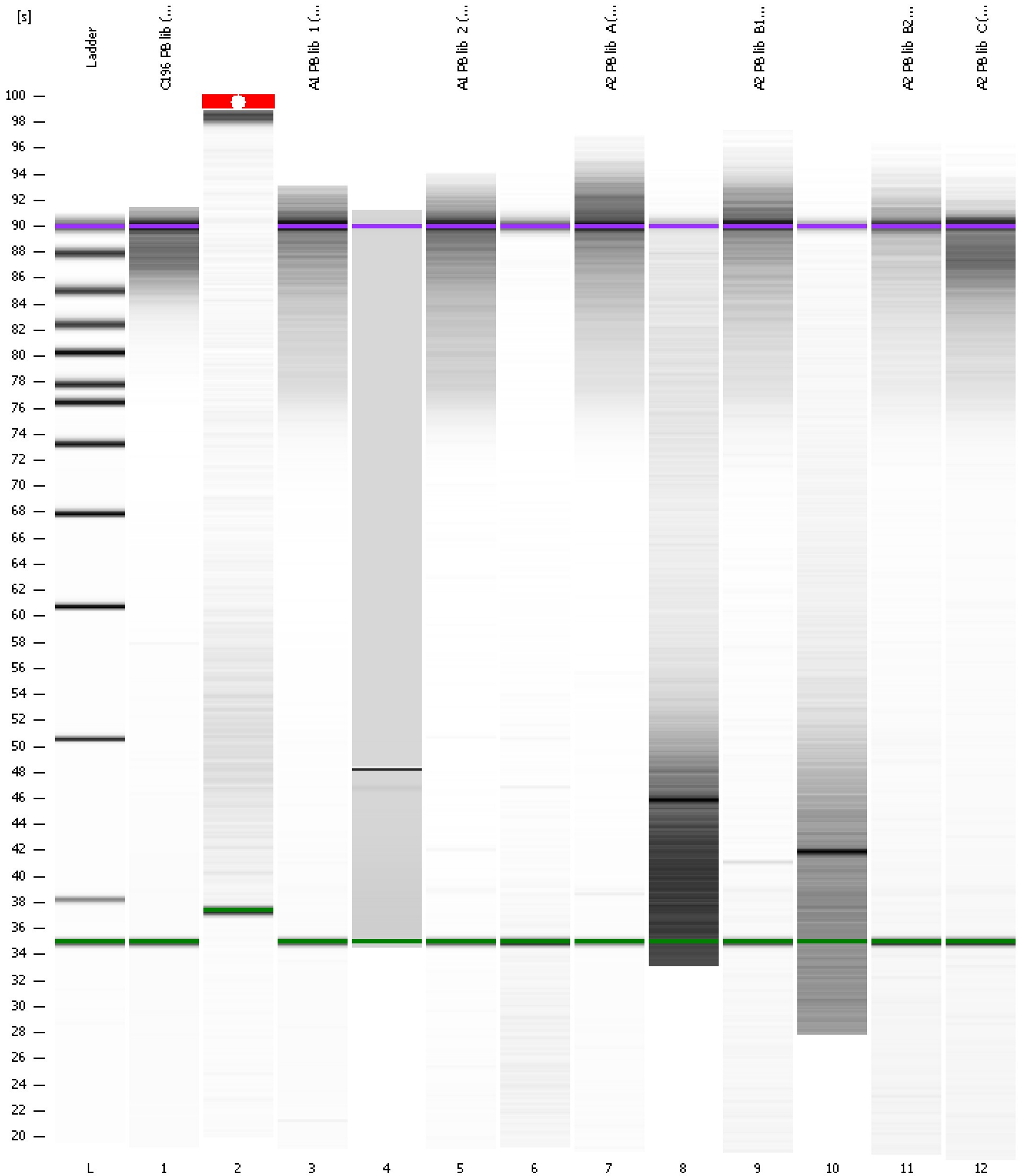
Region table for sample 12 : A2 PB lib_C (12/20/14)

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
893	31,072	10,498	14.66	245.4	96	56.4	Blue
7,712	14,595	10,289	7.19	122.9	48	17.9	Green

Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
Modified: 12/20/2014 1:46:30 PM

Gel Image



Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad

Created: 12/20/2014 1:10:03 PM
 Modified: 12/20/2014 1:46:30 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 13)		Instrument	Run		12/20/2014 1:45:06 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-12-20\2014-12-20_001.xad)		Instrument	Run		12/20/2014 1:10:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/20/2014 1:10:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/20/2014 1:10:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/20/2014 1:10:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/20/2014 1:10:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/20/2014 1:10:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/20/2014 1:10:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1