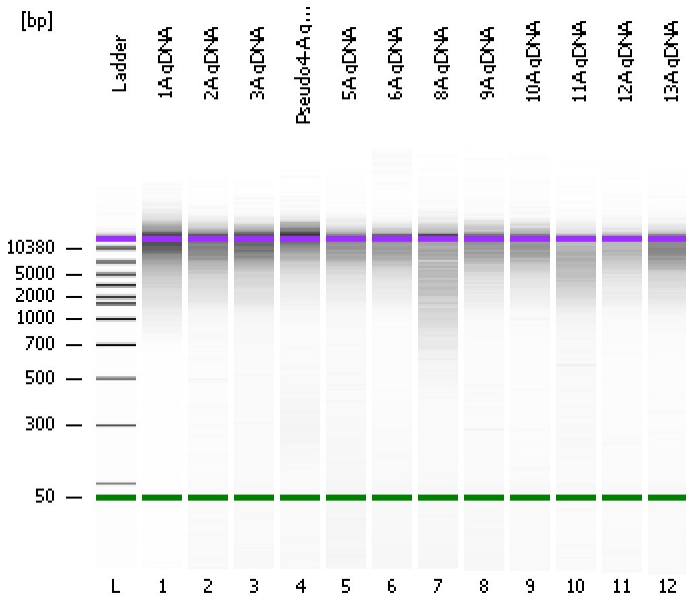


Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
Modified: 10/16/2014 4:13:56 PM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

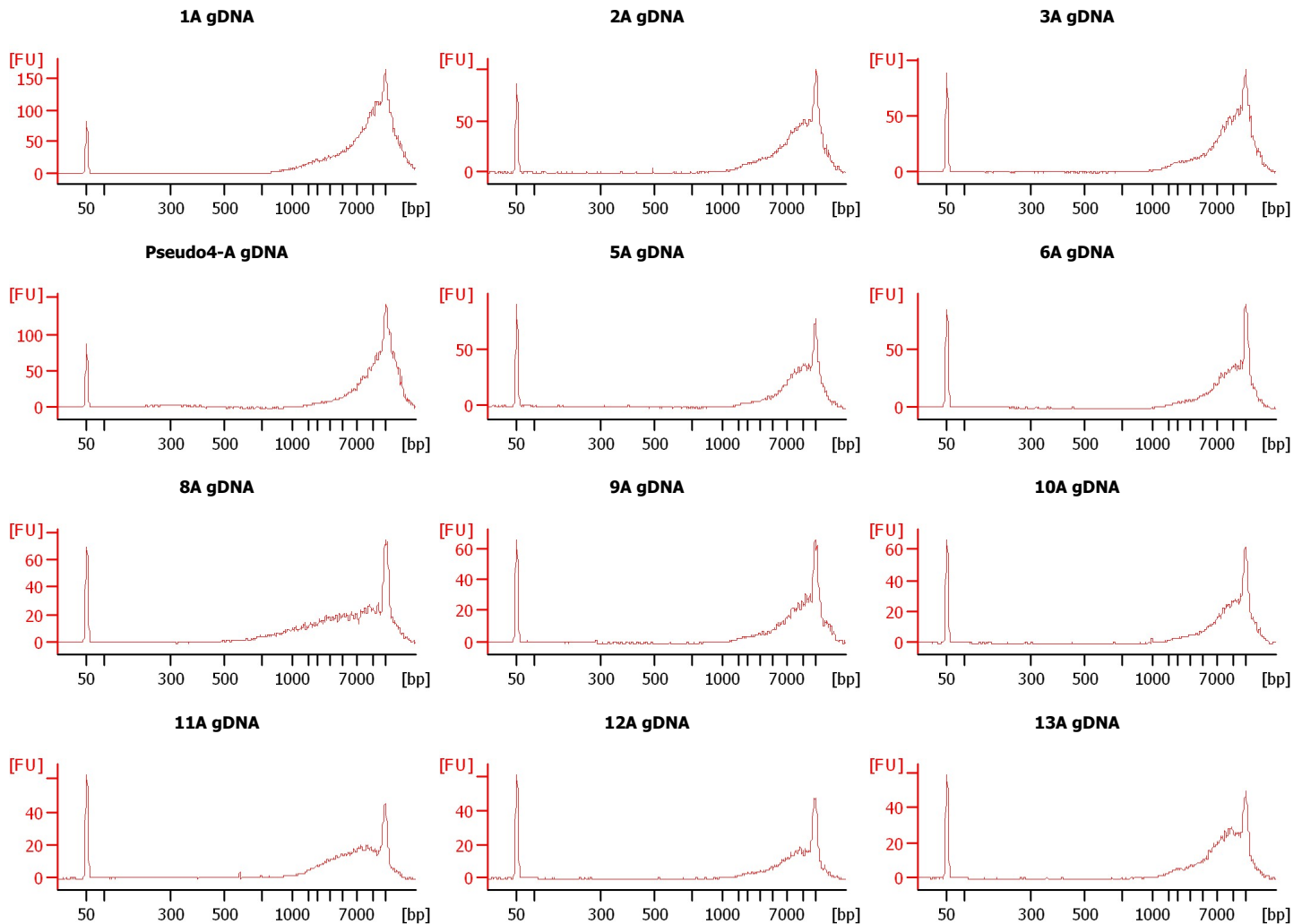
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\DNA 12000 Series II.xsy

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:



Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
Modified: 10/16/2014 4:13:56 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1A gDNA		<input type="checkbox"/>	✓			
2A gDNA		<input type="checkbox"/>	✓			
3A gDNA		<input type="checkbox"/>	✓			
Pseudo4-A gDNA		<input type="checkbox"/>	✓			
5A gDNA		<input type="checkbox"/>	✓			
6A gDNA		<input type="checkbox"/>	✓			
8A gDNA		<input type="checkbox"/>	✓			
9A gDNA		<input type="checkbox"/>	✓			
10A gDNA		<input type="checkbox"/>	✓			
11A gDNA		<input type="checkbox"/>	✓			
12A gDNA		<input type="checkbox"/>	✓			
13A gDNA		<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\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
Modified: 10/16/2014 4:13:56 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

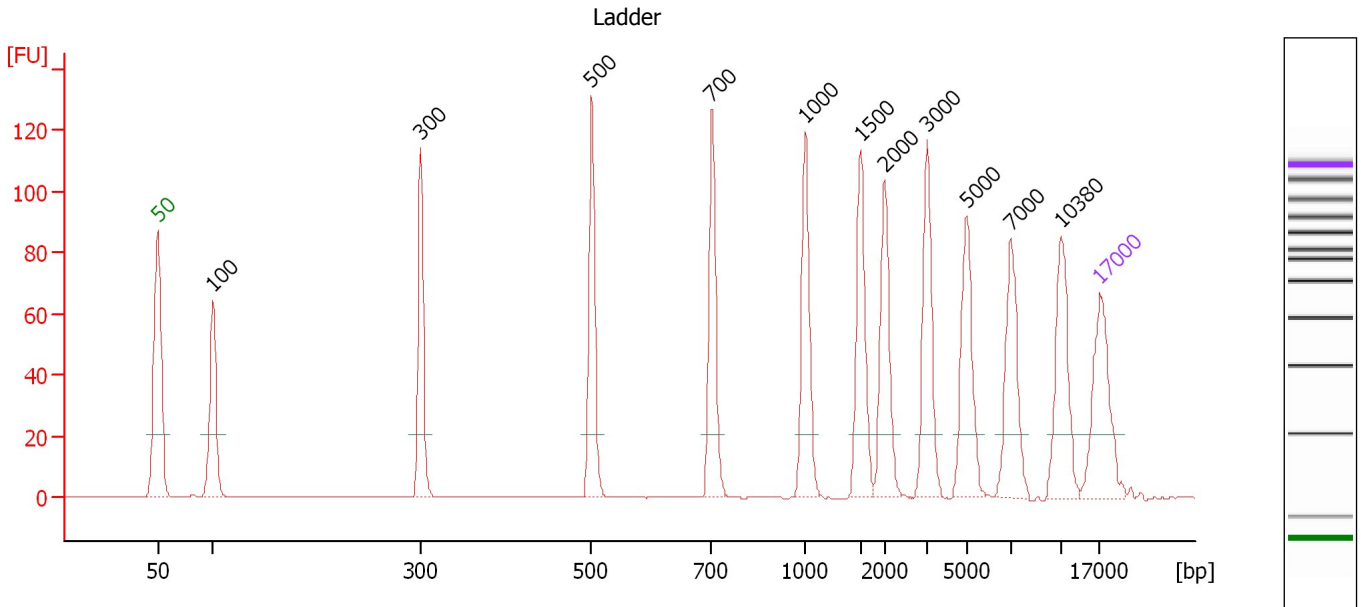
Ladder

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\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary



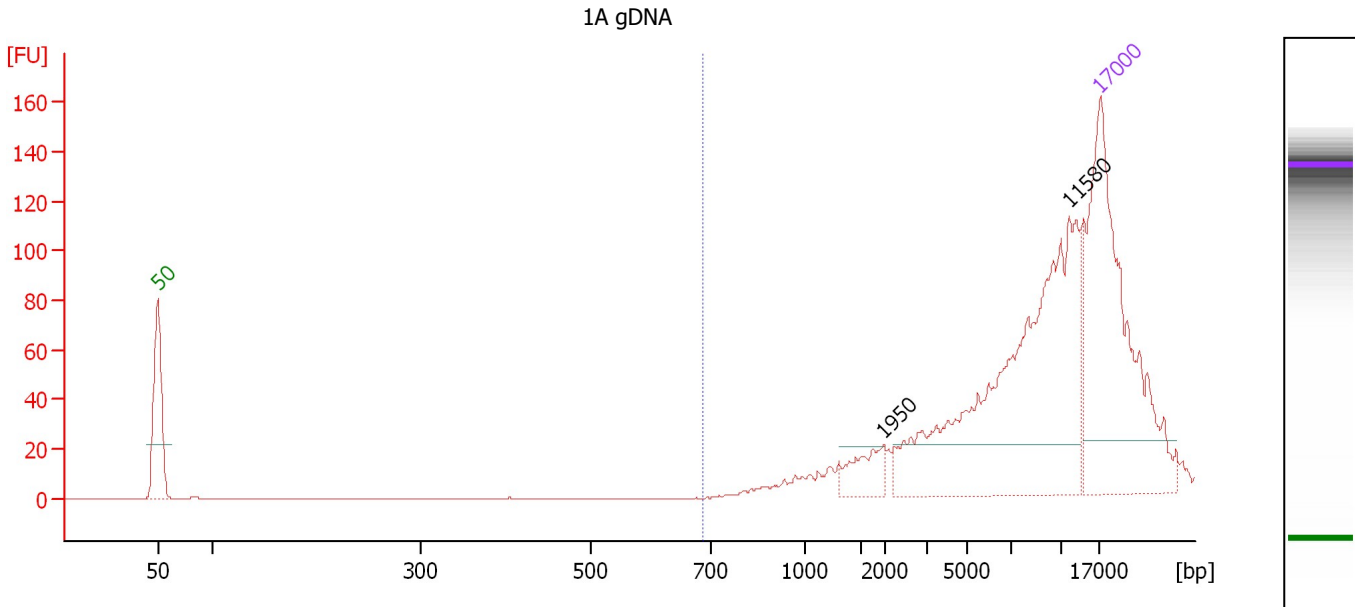
Peak table for Ladder

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\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 1A gDNA

Number of peaks found: 2 Area 1: 690.2

Peak table for sample 1 : 1A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	1,950	0.50	0.4	
3	11,580	5.98	0.8	
4	17,000	4.20	0.4	Upper Marker

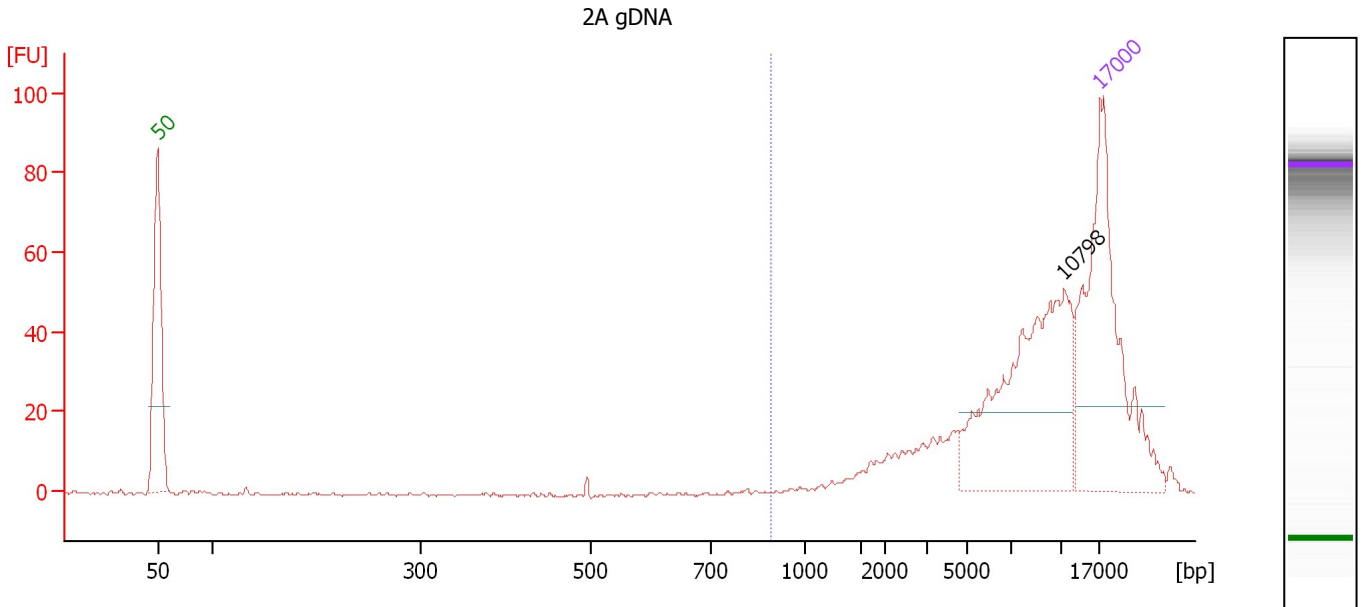
Region table for sample 1 : 1A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
685	43,922	12,407	7.78	690.2	99	64.2	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2A gDNA

Number of peaks found: 1 Area 1: 302.1

Peak table for sample 2 : 2A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	10,798	4.57	0.6	
3	17,000	4.20	0.4	Upper Marker

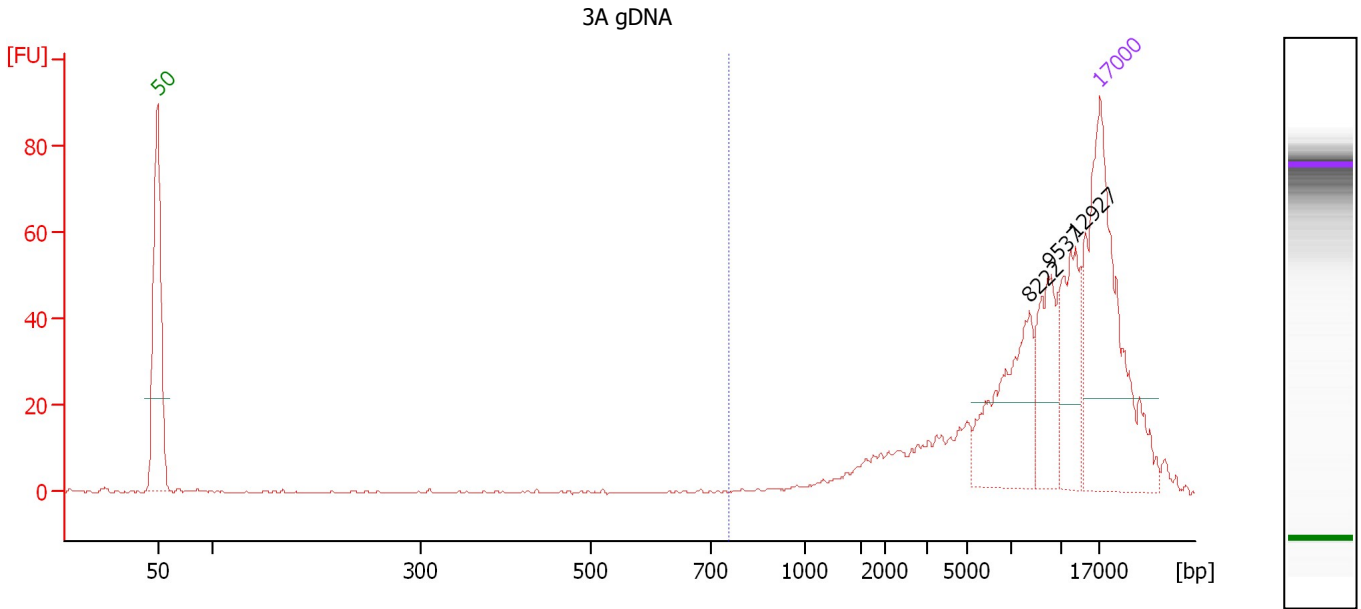
Region table for sample 2 : 2A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
889	34,517	11,769	6.69	302.1	98	56.4	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 3A gDNA

Number of peaks found: 3 Area 1: 333.0

Peak table for sample 3 : 3A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	8,222	2.23	0.4	
3	9,537	1.49	0.2	
4	12,927	1.45	0.2	
5	17,000	4.20	0.4	Upper Marker

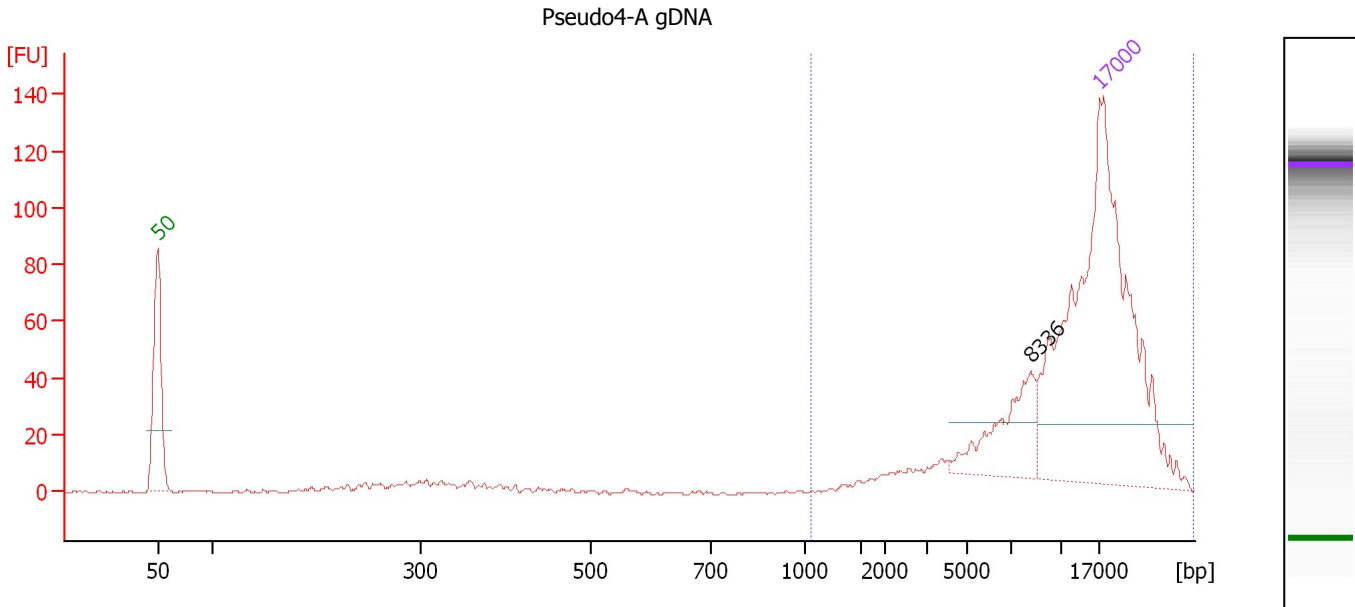
Region table for sample 3 : 3A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
752	33,199	11,676	8.18	333.0	93	57.2	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Pseudo4-A gDNA

Number of peaks found: 1 Area 1: 177.4

Peak table for sample 4 : Pseudo4-A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	8,336	0.83	0.2	
3	17,000	4.20	0.4	Upper Marker

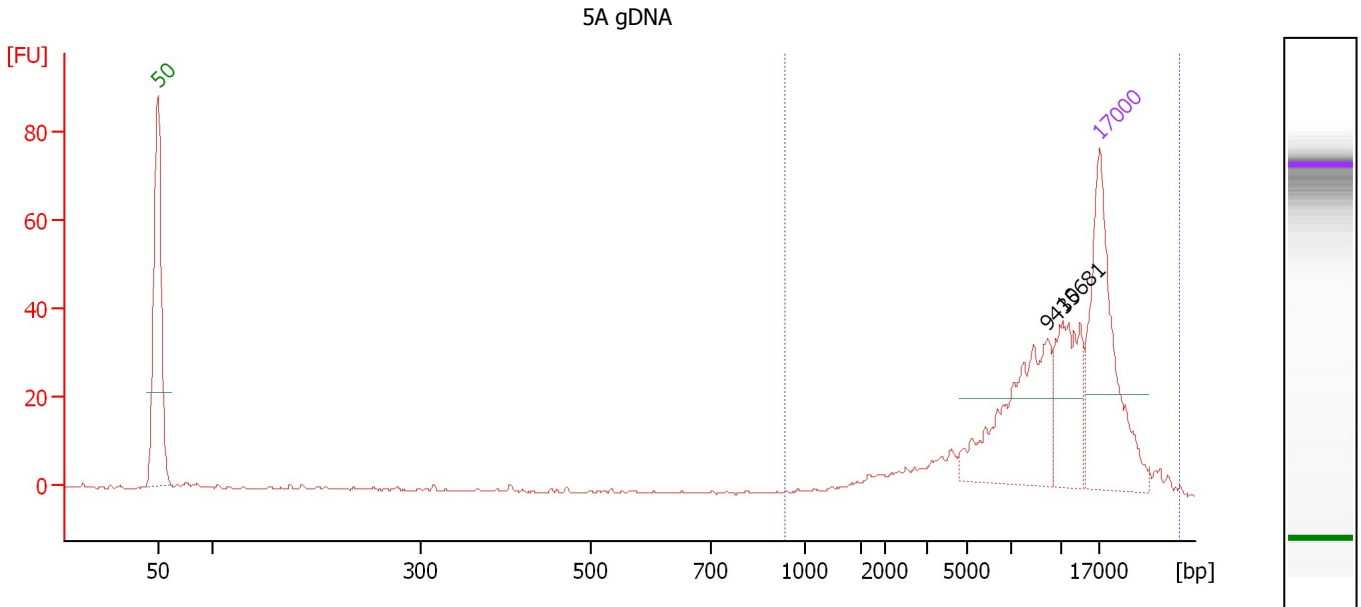
Region table for sample 4 : Pseudo4-A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
1,057	32,957	14,186	1.74	177.4	70	49.5	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 5A gDNA

Number of peaks found: 2 Area 1: 219.3

Peak table for sample 5 : 5A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	9,435	3.79	0.6	
3	10,681	2.16	0.3	
4	17,000	4.20	0.4	Upper Marker

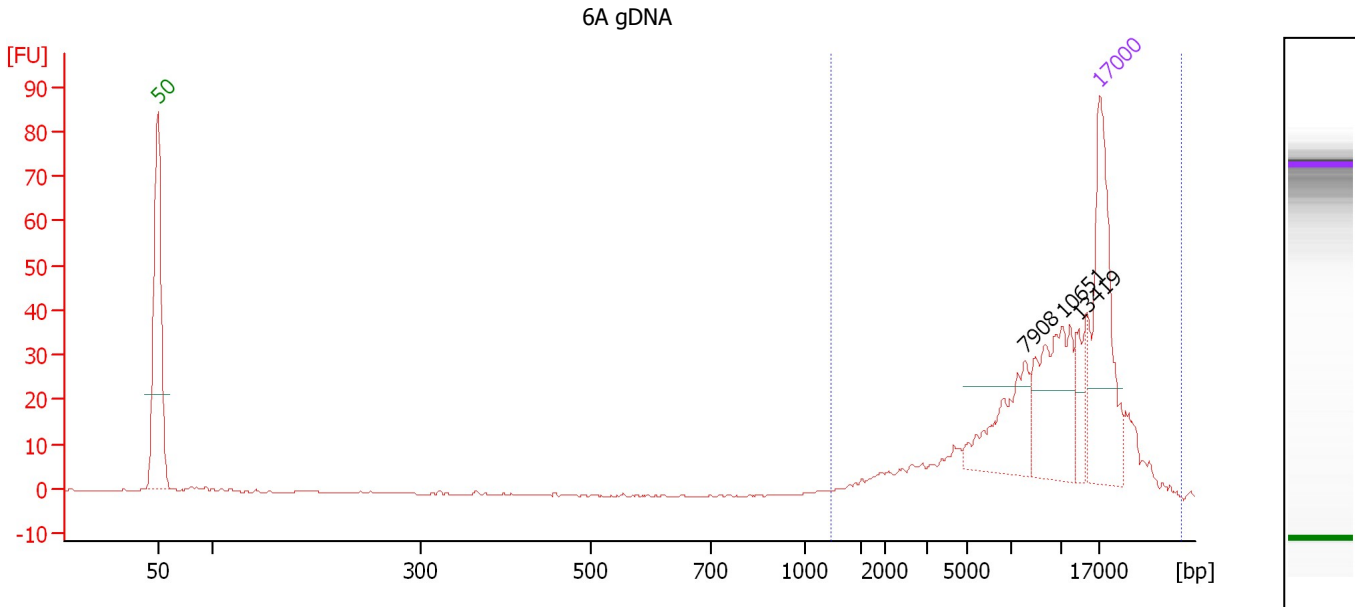
Region table for sample 5 : 5A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
937	30,635	11,857	8.71	219.3	93	52.1	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 6A gDNA

Number of peaks found: 3 Area 1: 215.7

Peak table for sample 6 : 6A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	7,908	2.39	0.5	
3	10,651	3.14	0.4	
4	13,419	0.86	0.1	
5	17,000	4.20	0.4	Upper Marker

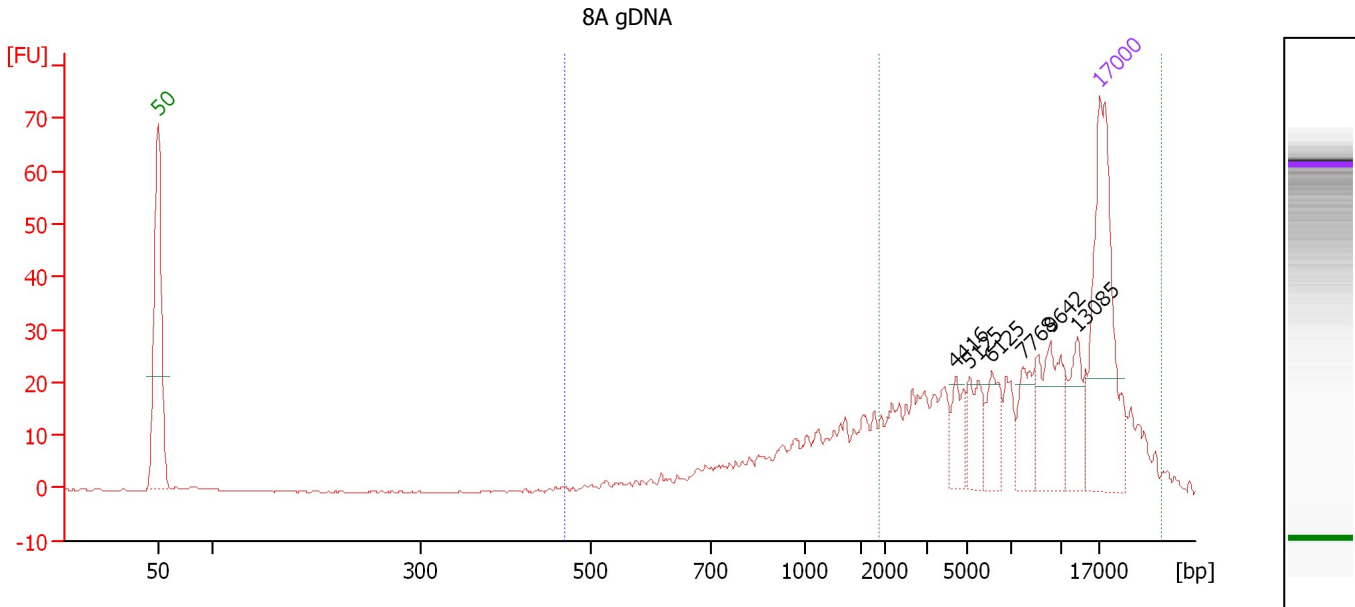
Region table for sample 6 : 6A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
1,229	30,890	11,994	10.42	215.7	98	49.0	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 8A gDNA

Number of peaks found: 6 Area 2: 243.6
 Area 1: 350.7

Peak table for sample 7 : 8A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	4,416	0.80	0.3	
3	5,125	0.81	0.2	
4	6,125	0.82	0.2	
5	7,768	1.04	0.2	
6	9,642	1.85	0.3	
7	13,085	1.14	0.1	
8	17,000	4.20	0.4	Upper Marker

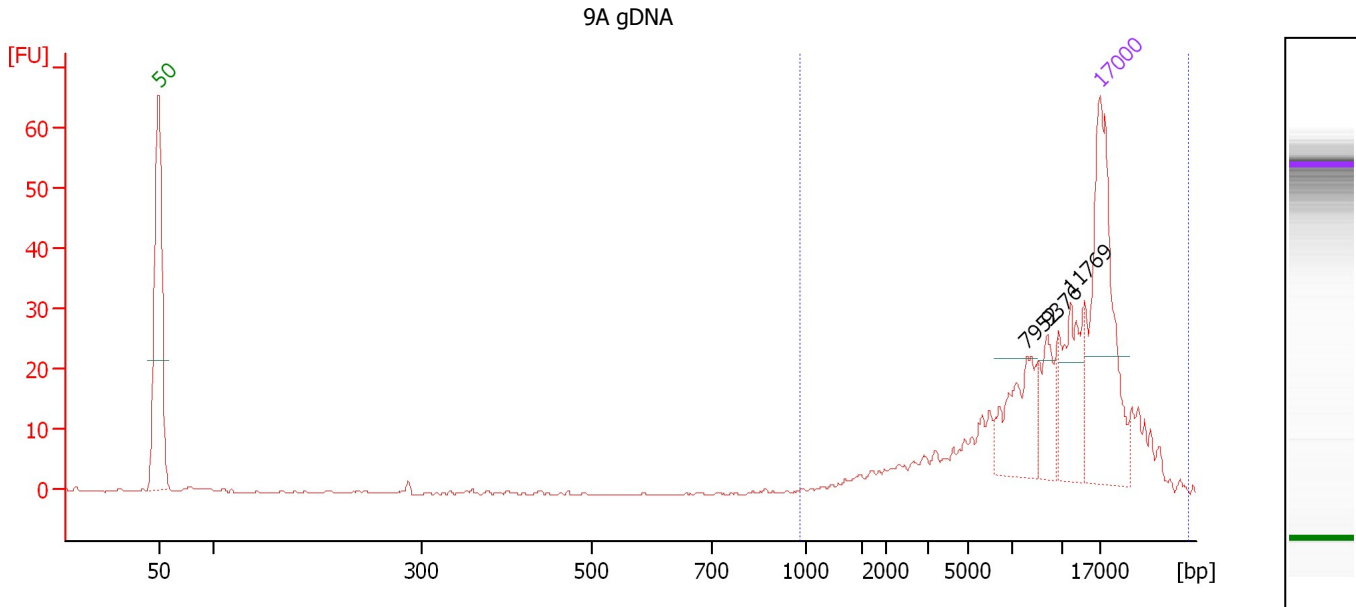
Region table for sample 7 : 8A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
469	38,571	8,876	17.97	350.7	98	85.1	Blue
1,895	27,477	10,679	11.96	243.6	68	61.1	Green

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 9A gDNA

Number of peaks found: 3 Area 1: 174.3

Peak table for sample 8 : 9A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	7,952	1.81	0.3	
3	9,376	1.12	0.2	
4	11,769	1.87	0.2	
5	17,000	4.20	0.4	Upper Marker

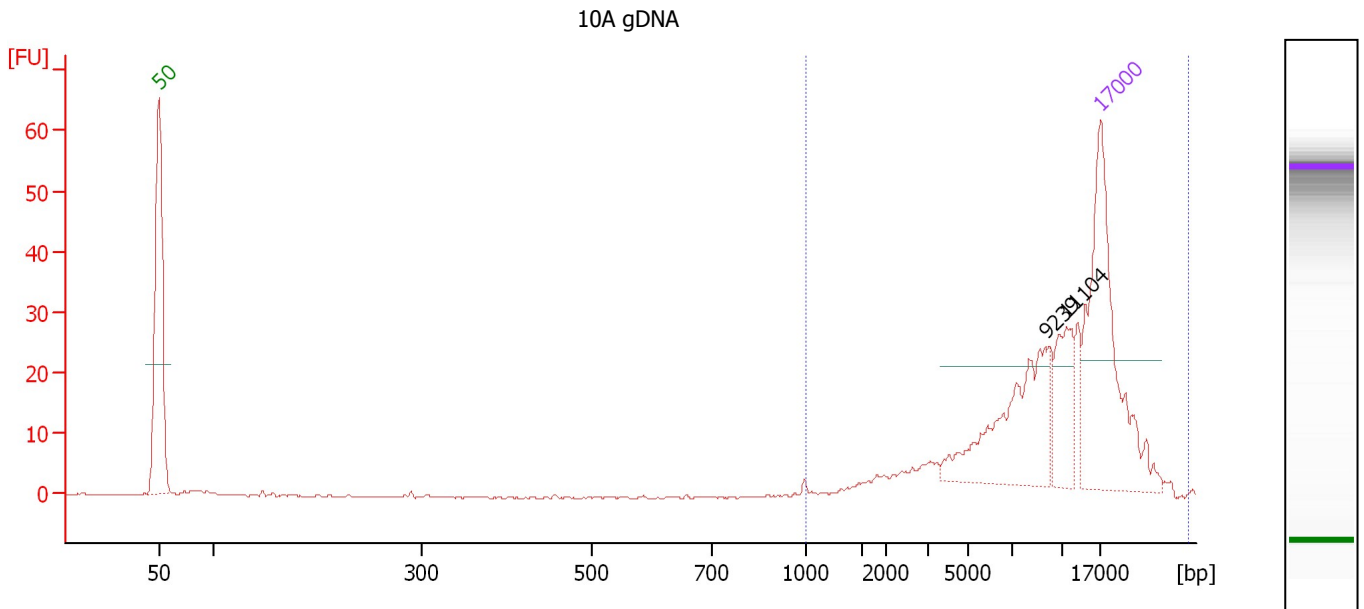
Region table for sample 8 : 9A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
981	31,950	12,291	9.39	174.3	98	53.0	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 10A gDNA

Number of peaks found: 2 Area 1: 145.4

Peak table for sample 9 : 10A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	9,239	3.06	0.5	
3	11,104	1.36	0.2	
4	17,000	4.20	0.4	Upper Marker

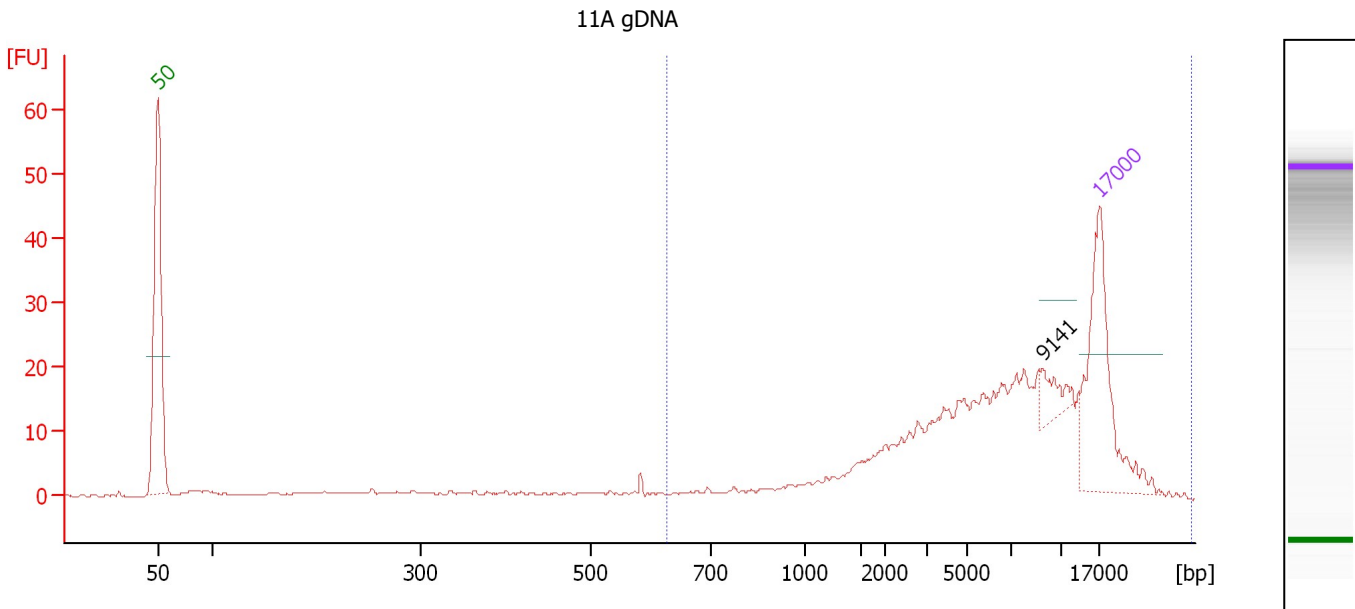
Region table for sample 9 : 10A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
998	31,980	12,053	6.84	145.4	95	51.7	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 11A gDNA

Number of peaks found: 1 Area 1: 183.5

Peak table for sample 10 : 11A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	9,141	0.74	0.1	
3	17,000	4.20	0.4	Upper Marker

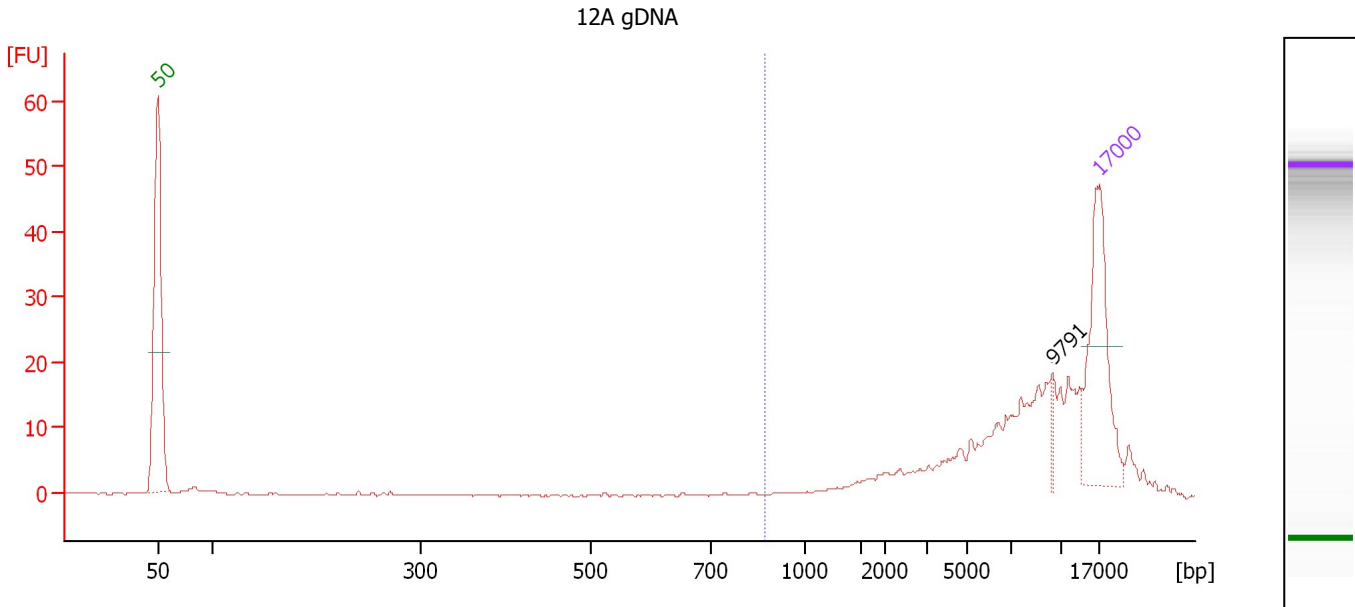
Region table for sample 10 : 11A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
624	32,473	8,970	14.62	183.5	90	70.2	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 12A gDNA

Number of peaks found: 1 Area 1: 117.9

Peak table for sample 11 : 12A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	9,791	0.23	0.0	
3	17,000	4.20	0.4	Upper Marker

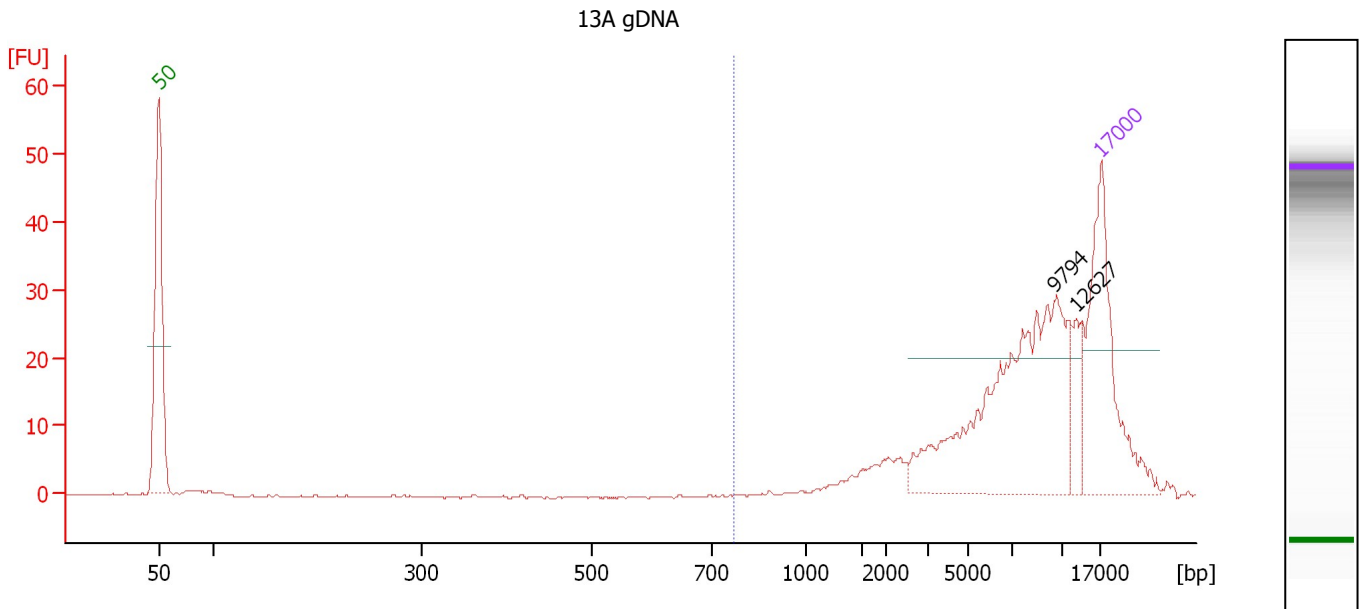
Region table for sample 11 : 12A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
869	33,353	11,186	10.08	117.9	96	54.8	Blue

Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 PM

Electropherogram Summary Continued ...



Overall Results for sample 12 : 13A gDNA

Number of peaks found: 2 Area 1: 182.3

Peak table for sample 12 : 13A gDNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	50	8.30	251.5	Lower Marker
2	9,794	8.20	1.3	
3	12,627	1.08	0.1	
4	17,000	4.20	0.4	Upper Marker

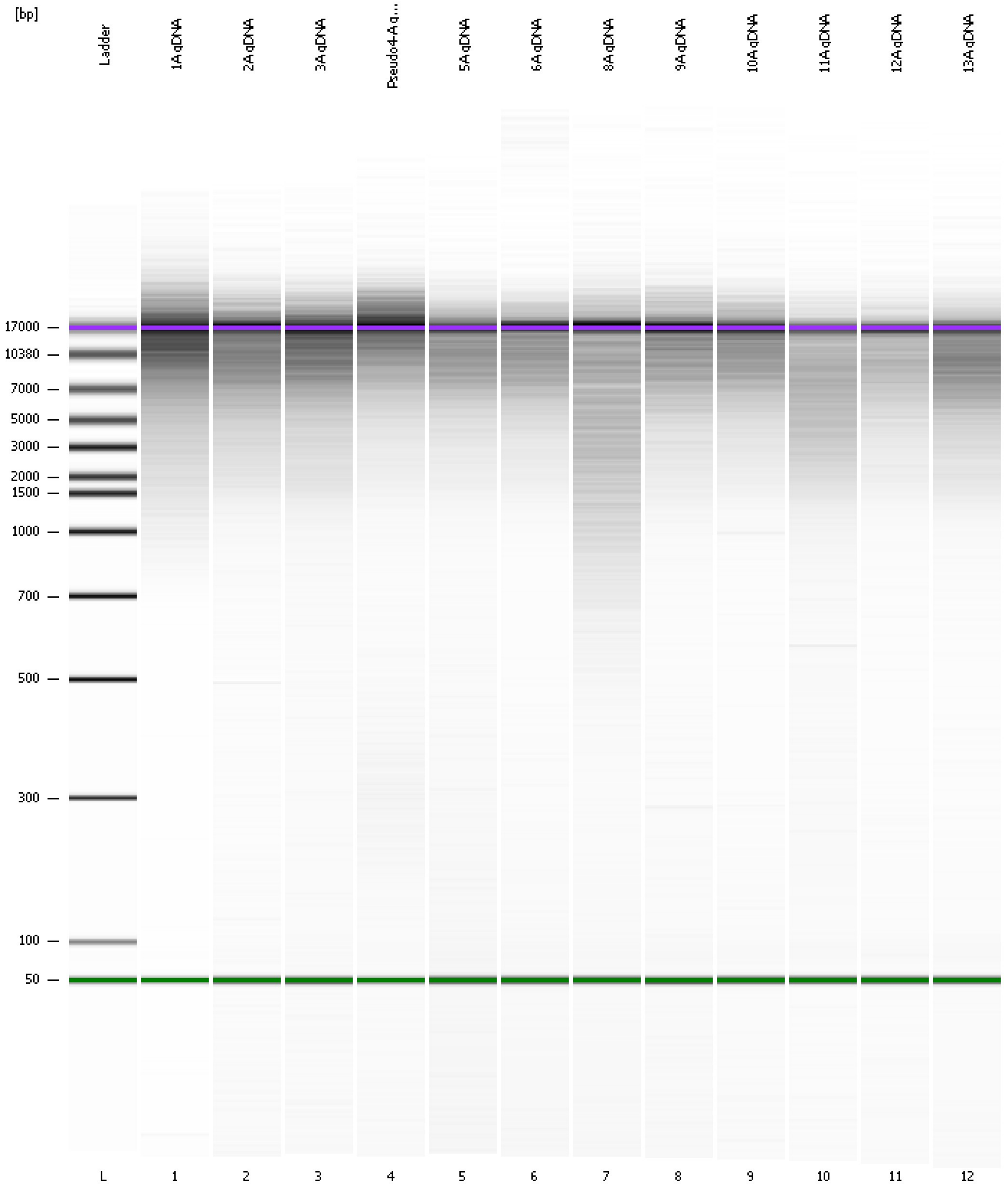
Region table for sample 12 : 13A gDNA

From [bp]	To [bp]	Average Size [bp]	Conc. [ng/μl]	Area	% of Total	Size distribution in CV [%]	Color
768	34,459	10,470	11.64	182.3	96	58.8	Blue

Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
Modified: 10/16/2014 4:13:56 PM

Gel Image

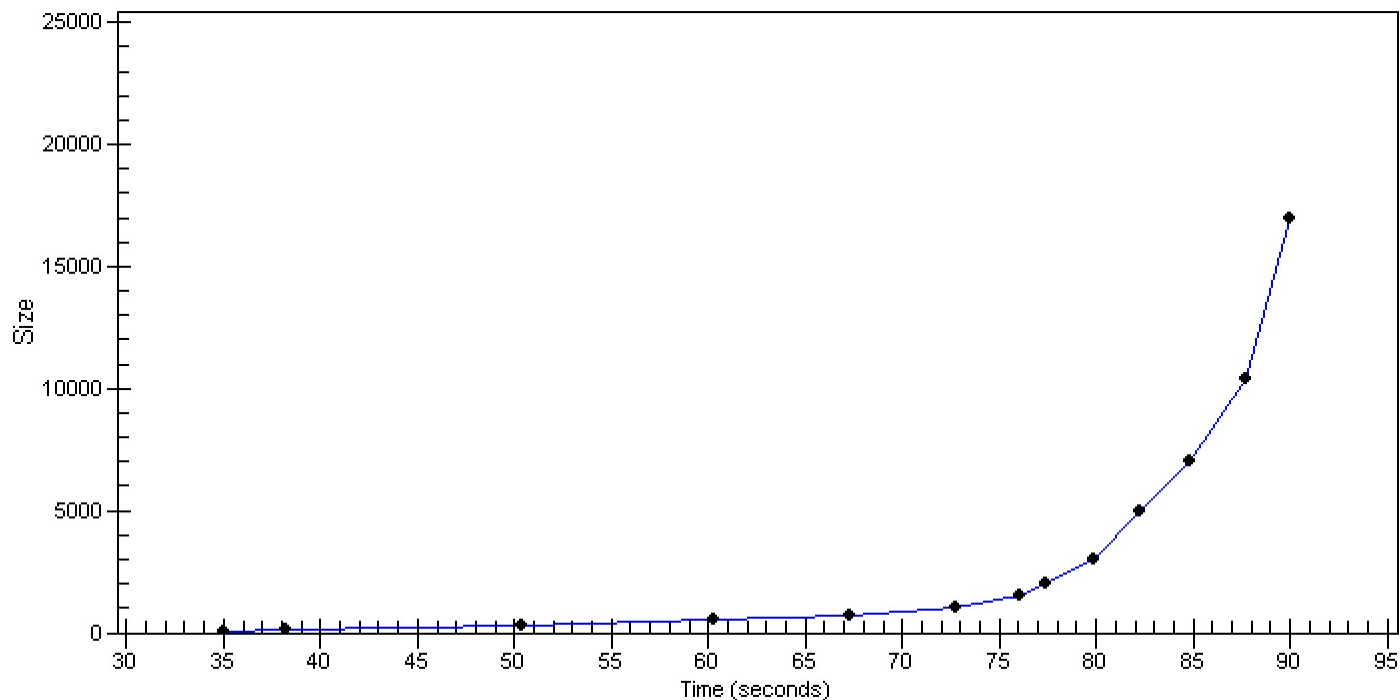


Assay Class: DNA 12000
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
Modified: 10/16/2014 4:13:56 PM

Curves

Standard Curve



Assay Class: DNA 12000
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad

Created: 10/16/2014 3:17:55 PM
 Modified: 10/16/2014 4:13:56 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		10/16/2014 3:52:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-10-16\2014-10-16_002.xad)		Instrument	Run		10/16/2014 3:17:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/16/2014 3:17:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/16/2014 3:17:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/16/2014 3:17:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/16/2014 3:17:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/16/2014 3:17:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/16/2014 3:17:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1