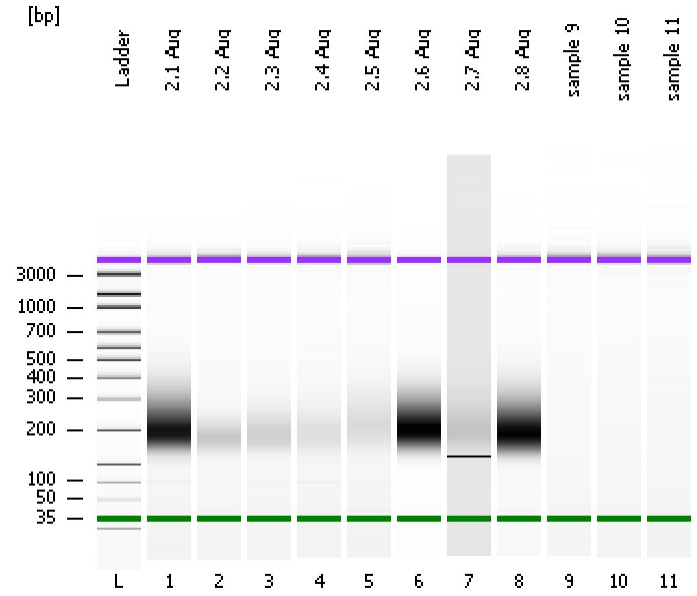
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

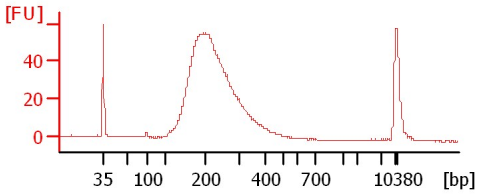
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

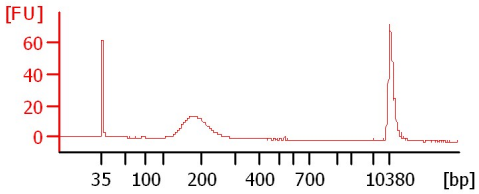
Chip Information:

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

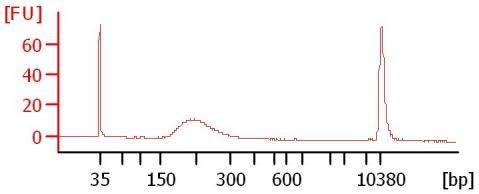
2.1 Aug



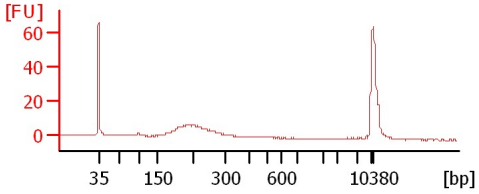
2.2 Aug



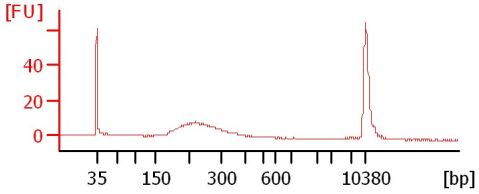
2.3 Aug



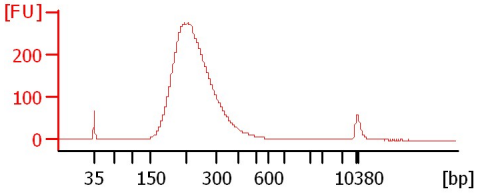
2.4 Aug



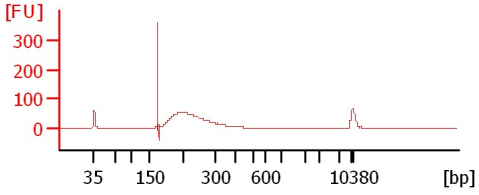
2.5 Aug



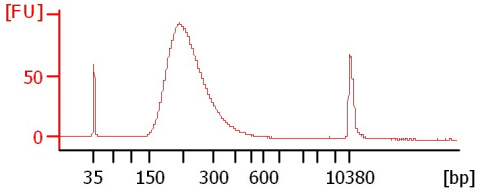
2.6 Aug



2.7 Aug



2.8 Aug



sample 9

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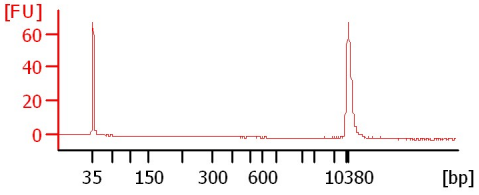

sample 10

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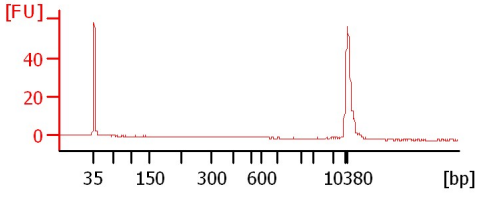

sample 11

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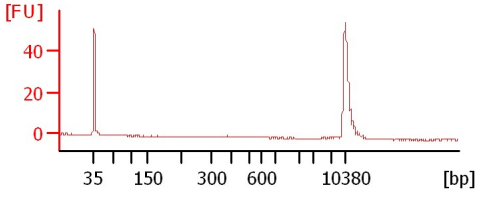


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
2.1 Aug		☐	✓			
2.2 Aug		☐	✓			
2.3 Aug		☐	✓			
2.4 Aug		☐	✓			
2.5 Aug		☐	✓			
2.6 Aug		☐	✓			
2.7 Aug		☐	✓			
2.8 Aug		☐	✓			
sample 9	Blank	☐	✓			
sample 10	Blank	☐	✓			
sample 11	Blank	☐	✓			
Ladder		☐	✓			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 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

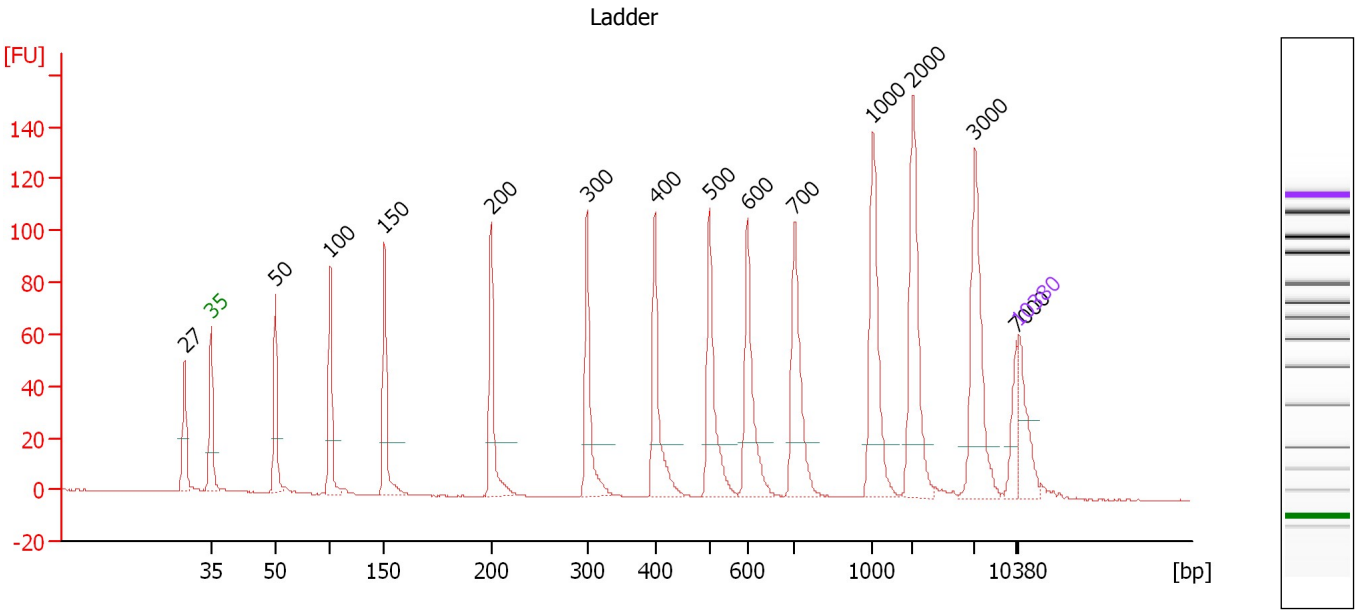
Ladder

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:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

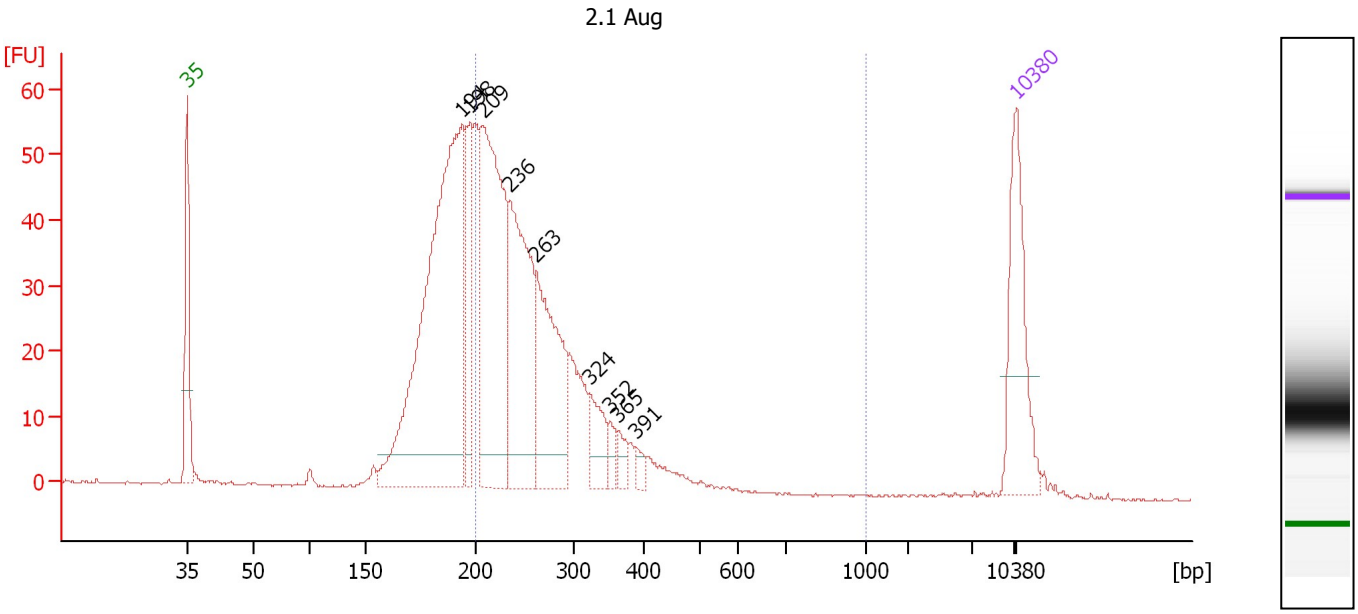
Peak table for Ladder

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		27	0.00	0.0		40.69
2		35	125.00	5,411.3	Lower Marker	43.00
3		50	150.00	4,545.5	Ladder Peak	48.54
4		100	150.00	2,272.7	Ladder Peak	53.30
5		150	150.00	1,515.2	Ladder Peak	58.02
6		200	150.00	1,136.4	Ladder Peak	67.26
7		300	150.00	757.6	Ladder Peak	75.57
8		400	150.00	568.2	Ladder Peak	81.44
9		500	150.00	454.5	Ladder Peak	86.20
10		600	150.00	378.8	Ladder Peak	89.44
11		700	150.00	324.7	Ladder Peak	93.55
12		1,000	150.00	227.3	Ladder Peak	100.34
13		2,000	150.00	113.6	Ladder Peak	103.81
14		3,000	150.00	75.8	Ladder Peak	109.17
15		7,000	150.00	32.5	Ladder Peak	112.72
16		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 2.1 Aug

Number of peaks found:	9	Corr. Area 1:	589.0
Noise:	0.2		

Peak table for sample 1 : 2.1 Aug

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	194	520.80	4,065.2		66.17
3	198	84.44	646.1		66.89
4	209	303.50	2,205.1		67.97
5	236	206.37	1,324.2		70.26
6	263	158.37	913.6		72.47
7	324	37.23	174.2		76.97
8	352	12.94	55.7		78.63
9	365	12.26	50.9		79.39
10	391	8.54	33.1		80.92
11	10,380	75.00	10.9	Upper Marker	113.00

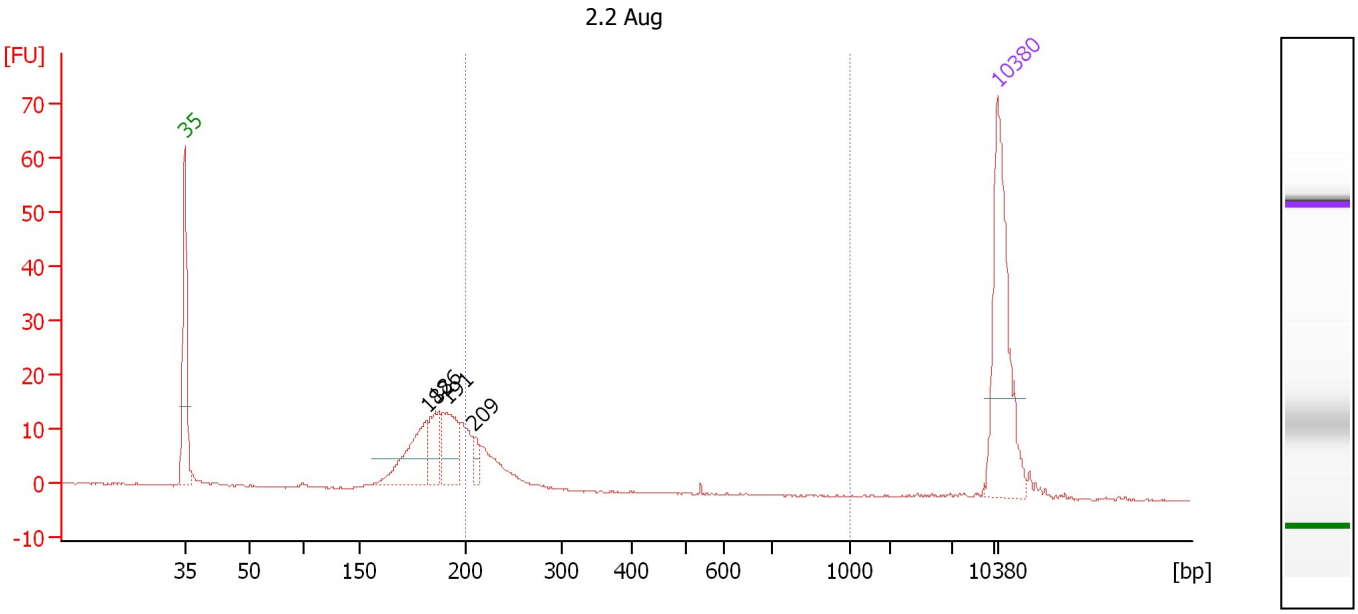
Region table for sample 1 : 2.1 Aug

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	267	1,000	589.0	5,368.8	58	24.0	904.02	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2.2 Aug

Number of peaks found:	4	Corr. Area 1:	50.6
Noise:	0.1		

Peak table for sample 2 : 2.2 Aug

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	182	56.40	470.6		63.85
3	186	29.36	239.7		64.59
4	191	42.45	336.3		65.64
5	209	10.10	73.3		67.99
6	10,380	75.00	10.9	Upper Marker	113.00

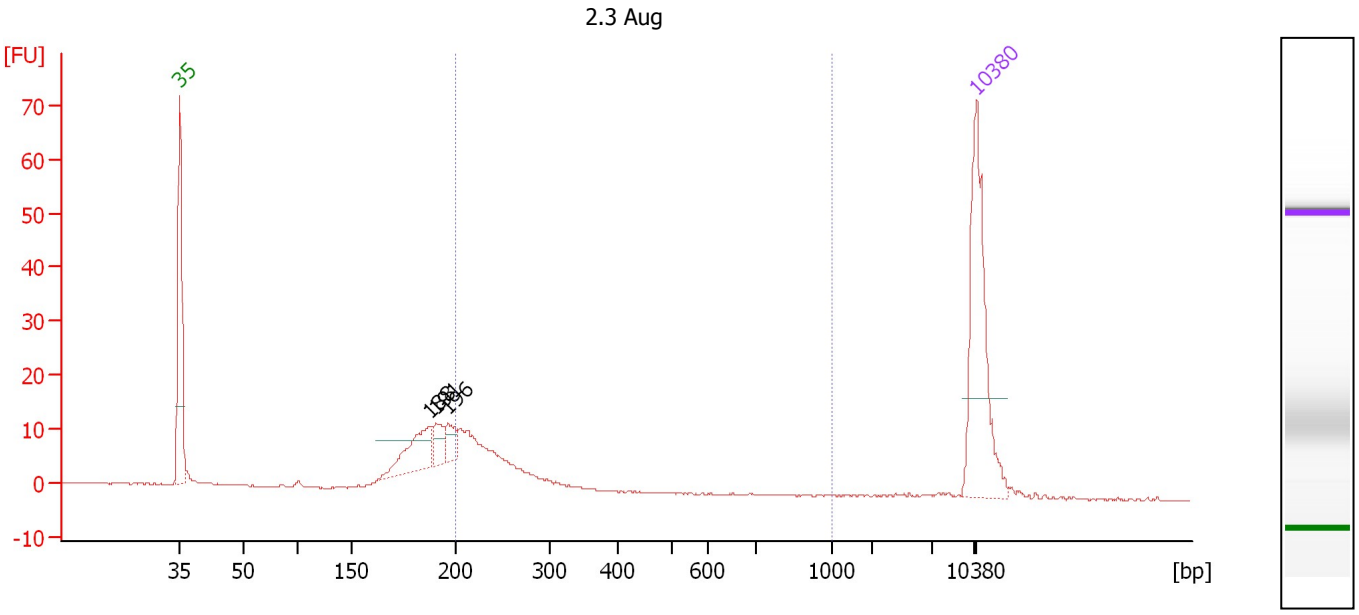
Region table for sample 2 : 2.2 Aug

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	232	1,000	50.6	440.7	27	19.8	66.27	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 2.3 Aug

Number of peaks found:	3	Corr. Area 1:	79.8
Noise:	0.1		

Peak table for sample 3 : 2.3 Aug

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	43.77	353.4		64.97
3	191	16.32	129.7		65.54
4	196	14.55	112.3		66.57
5	10,380	75.00	10.9	Upper Marker	113.00

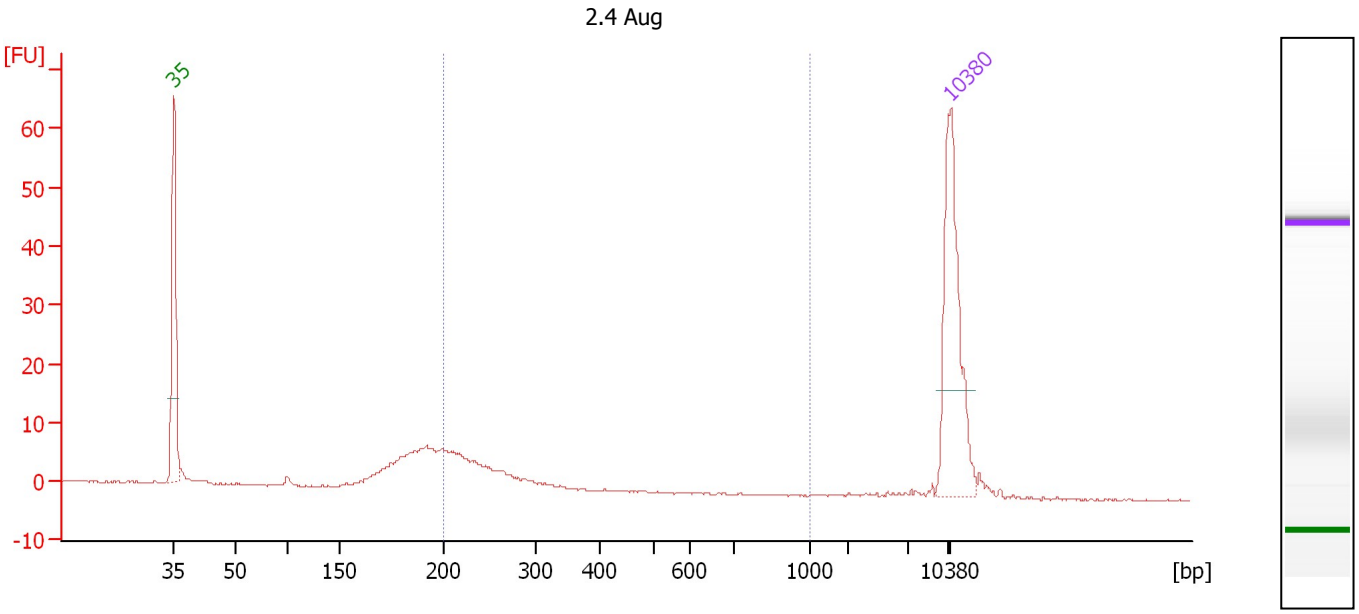
Region table for sample 3 : 2.3 Aug

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	242	1,000	79.8	652.8	43	15.8	103.05	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 2.4 Aug

Number of peaks found:	0	Corr. Area 1:	48.3
Noise:	0.2		

Peak table for sample 4 : 2.4 Aug

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 4 : 2.4 Aug

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	244	1,000	48.3	407.2	41	14.8	64.88	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
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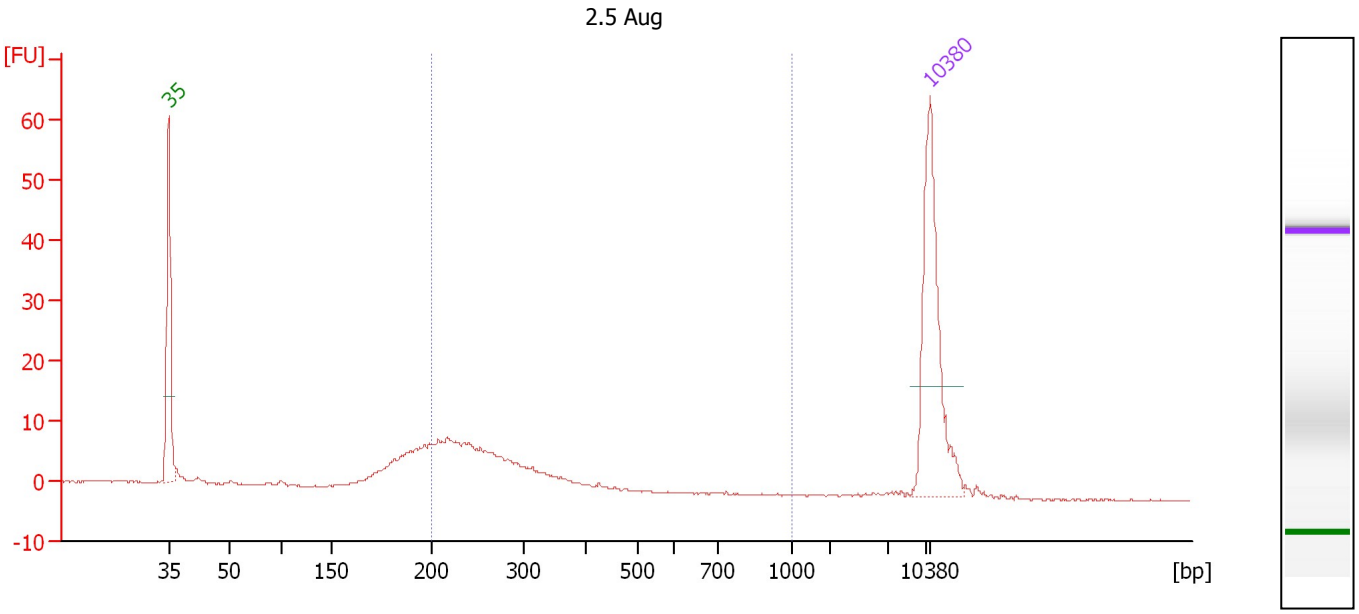
Electropherogram Summary Continued ...



Overall Results for sample 5 : 2.5 Aug

Number of peaks found:	0	Corr. Area 1:	97.1
Noise:	0.1		

Peak table for sample 5 : 2.5 Aug

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 : 2.5 Aug

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	269	1,000	97.1	725.8	61	21.2	124.06	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

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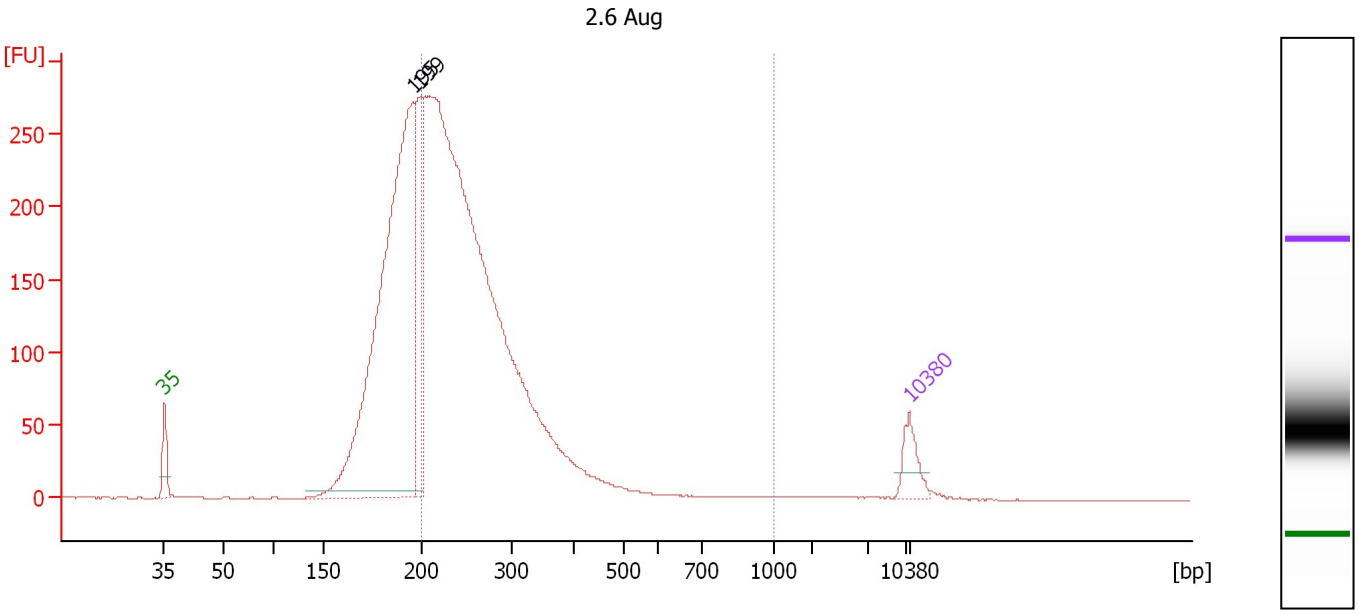


Overall Results for sample 6 : 2.6 Aug

Number of peaks found:	2	Corr. Area 1:	2,974.1
Noise:	0.2		

Peak table for sample 6 : 2.6 Aug

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		195	2,575.06	20,008.2		66.33
3		199	560.80	4,274.3		67.03
4	▶	10,380	75.00	10.9	Upper Marker	113.00

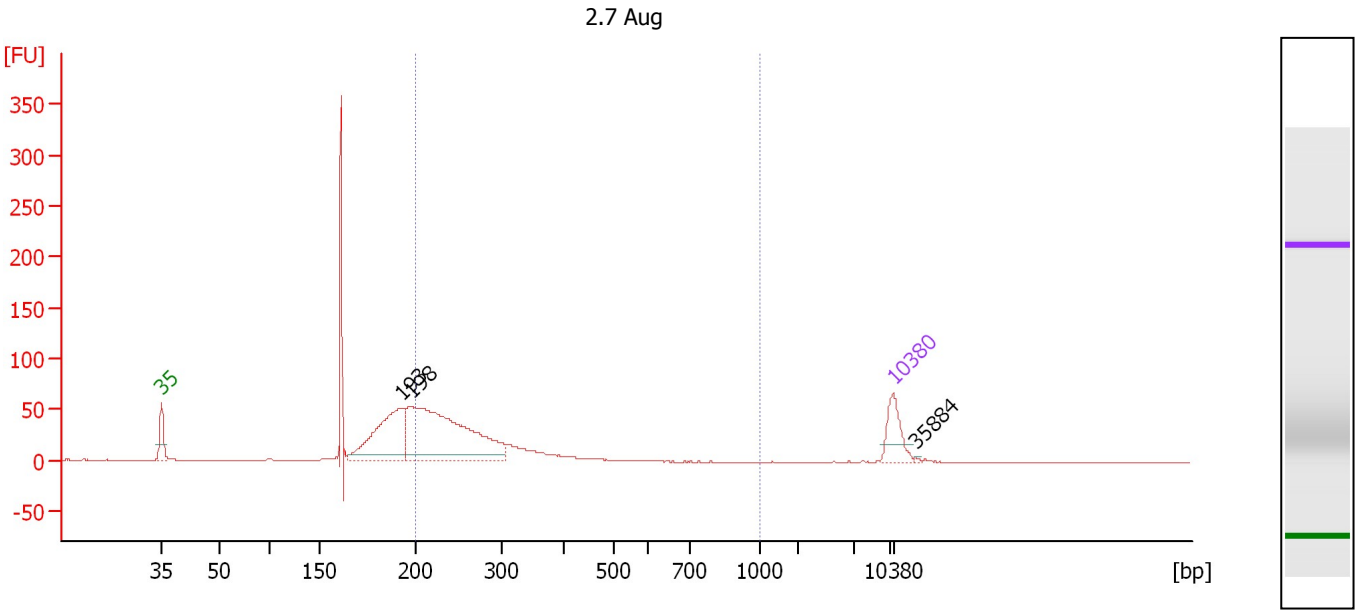
Region table for sample 6 : 2.6 Aug

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	271	1,000	2,974.1	27,597.4	61	30.2	4,649.03	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 2.7 Aug

Number of peaks found:	3	Corr. Area 1:	526.9
Noise:	0.2		

Peak table for sample 7 : 2.7 Aug

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	193	372.95	2,924.0		66.01
3	198	783.51	5,997.3		66.88
4	10,380	75.00	10.9	Upper Marker	113.00
5	35,884	0.00	0.0		115.09

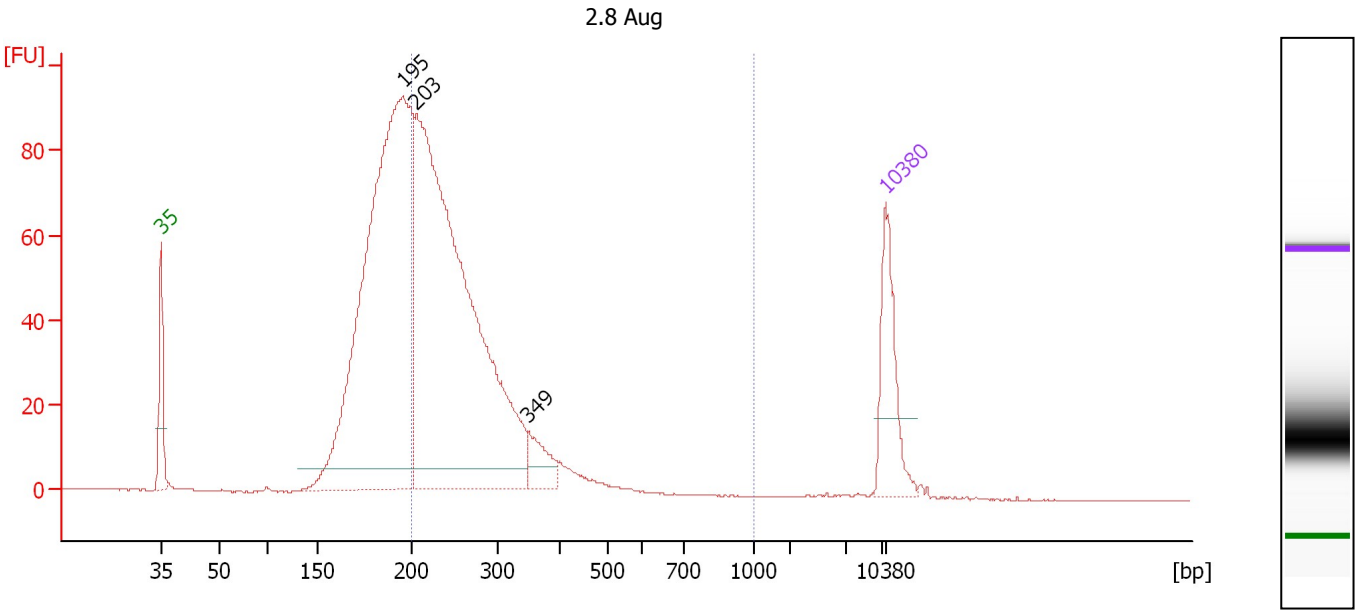
Region table for sample 7 : 2.7 Aug

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	265	1,000	526.9	4,389.5	52	22.5	735.73	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 2.8 Aug

Number of peaks found:	3	Corr. Area 1:	861.4
Noise:	0.1		

Peak table for sample 8 : 2.8 Aug

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	195	1,029.22	7,997.0		66.33
3	203	1,062.14	7,922.4		67.52
4	349	42.15	183.1		78.44
5	10,380	75.00	10.9	Upper Marker	113.00

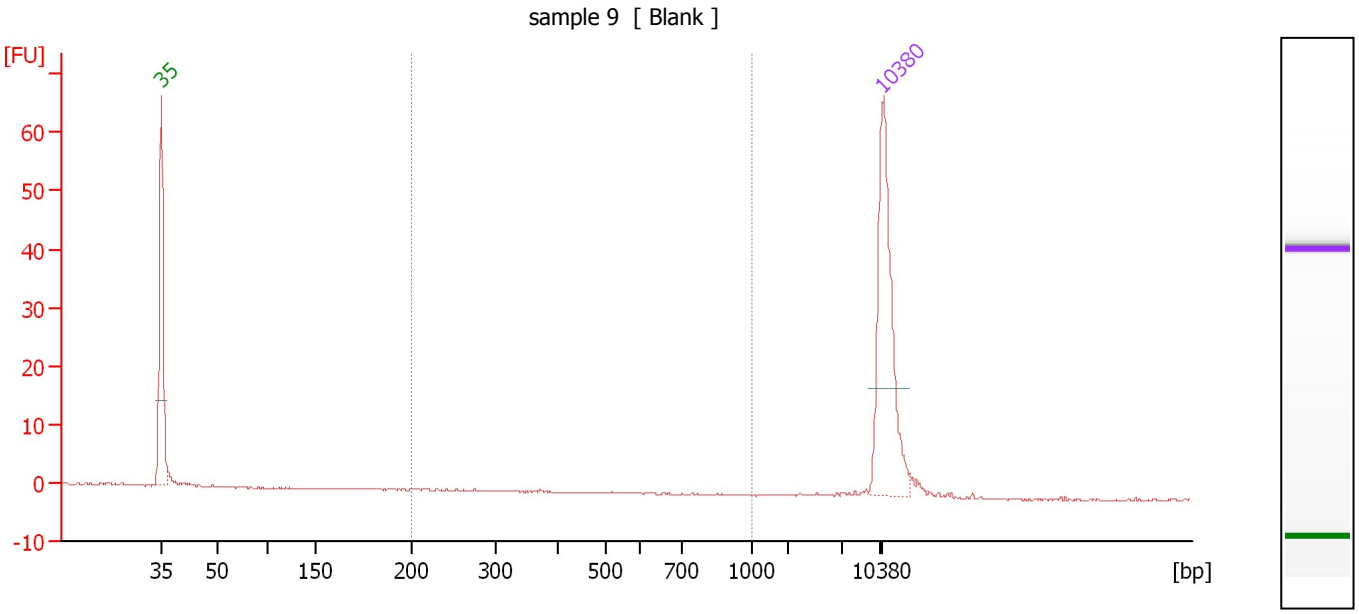
Region table for sample 8 : 2.8 Aug

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	266	1,000	861.4	6,648.9	53	25.2	1,111.29	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found:	0	Corr. Area 1:	0.0
Noise:	0.1		

Peak table for sample 9 : sample 9

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

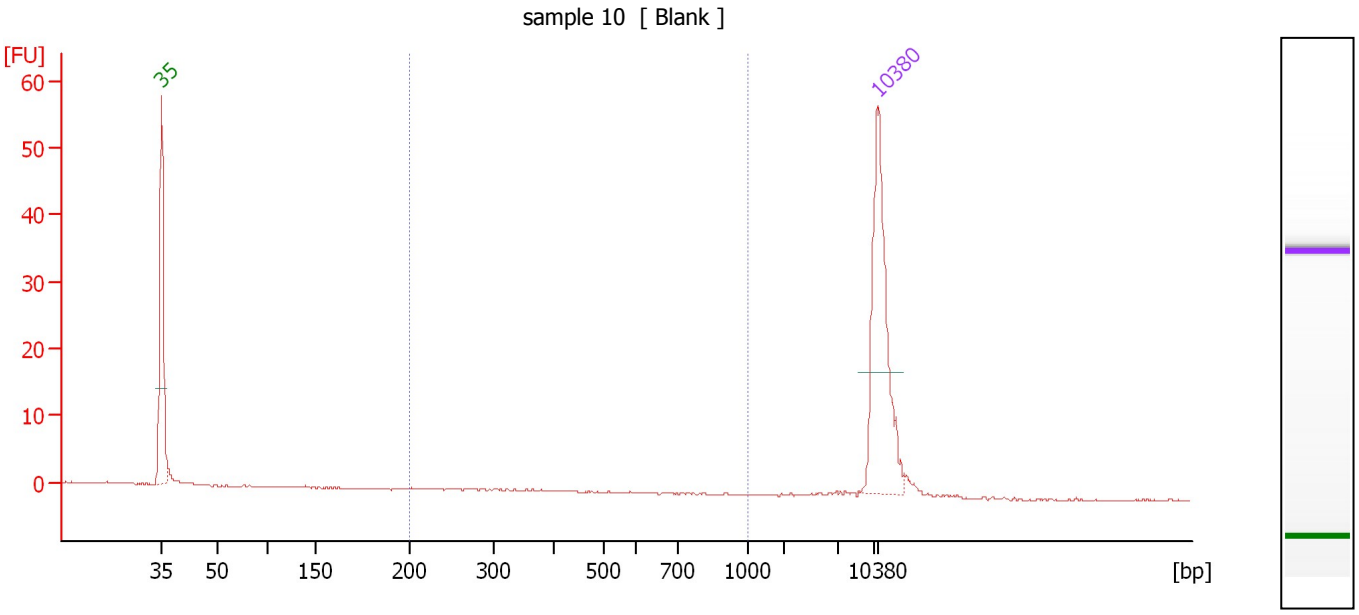
Region table for sample 9 : sample 9

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	372	1,000	0.0	0.1	0	0.5	0.04	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found:	0	Corr. Area 1:	0.0
Noise:	0.1		

Peak table for sample 10 : sample 10

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

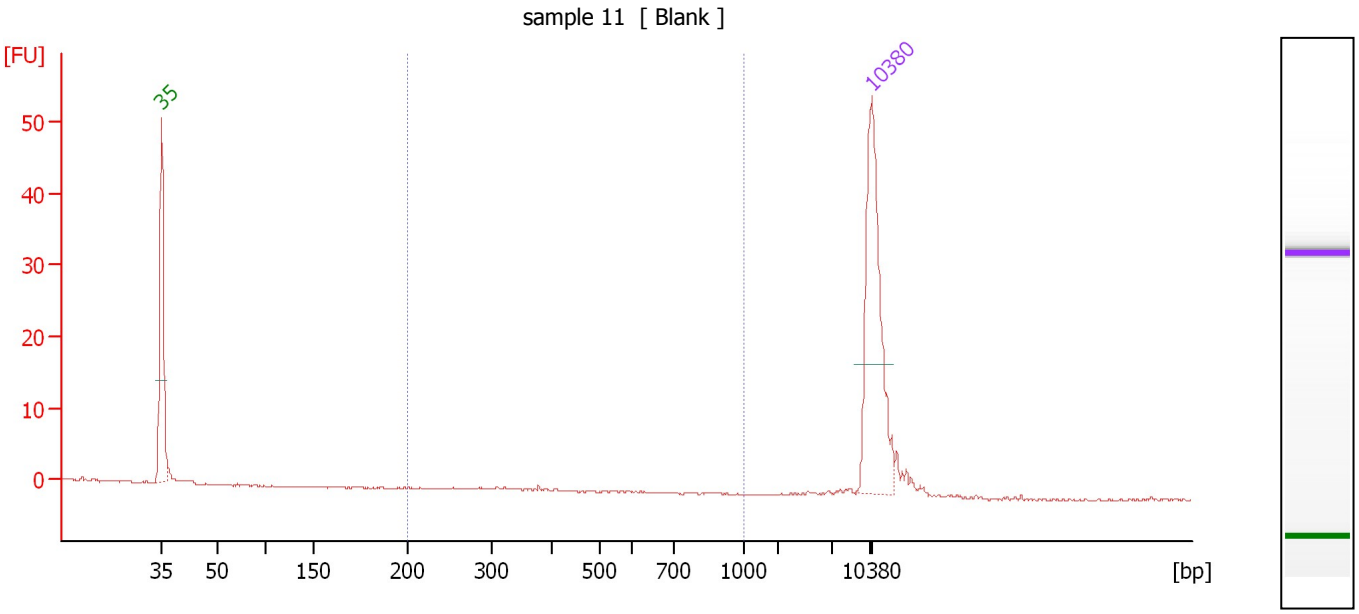
Region table for sample 10 : sample 10

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	349	1,000	0.0	0.0	0	7.3	0.00	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
Modified: 4/28/2015 1:46:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found:	0	Corr. Area 1:	0.0
Noise:	0.1		

Peak table for sample 11 : sample 11

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 11 : sample 11

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	378	1,000	0.0	0.2	0	0.2	0.05	

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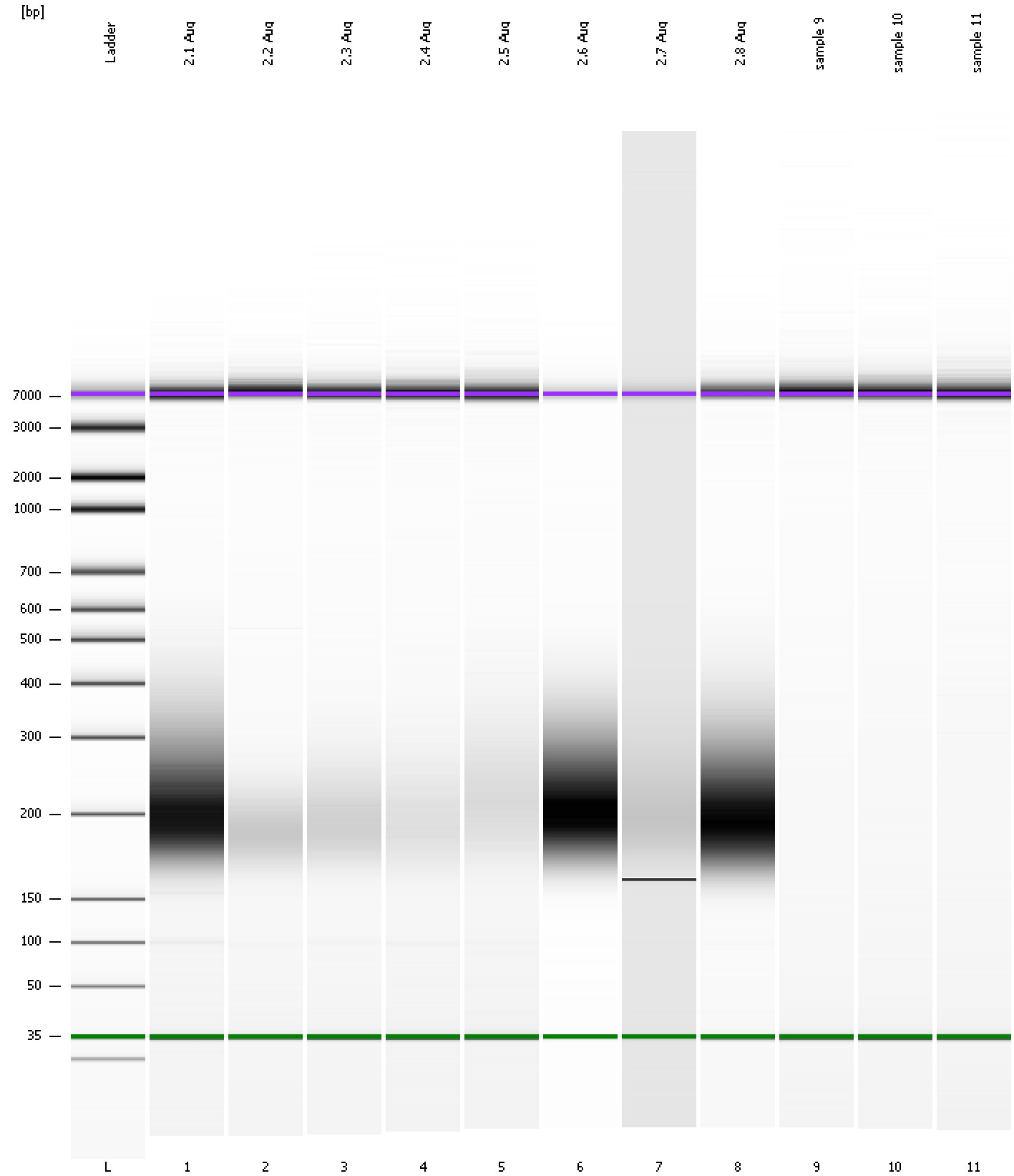
Gel Image



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Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad

Created: 4/28/2015 12:07:10 PM
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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		4/28/2015 12:47:37 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-28\2015-04-28_003.xad)		Instrument	Run		4/28/2015 12:07:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/28/2015 12:07:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/28/2015 12:07:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/28/2015 12:07:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/28/2015 12:07:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/28/2015 12:07:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/28/2015 12:07:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1