

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-29\2016-04-29_003.xad

Created: 4/29/2016 3:10:36 PM
Modified: 4/29/2016 3:58:14 PM

Electrophoresis File Run Summary

Instrument Information:

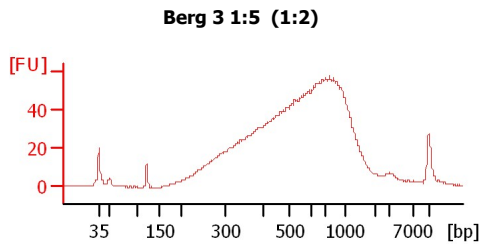
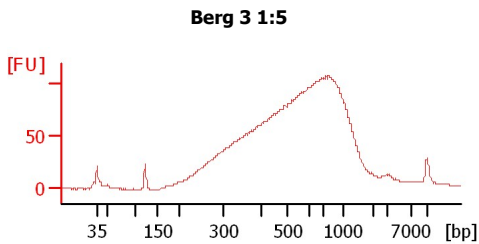
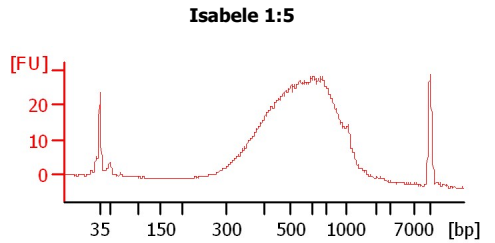
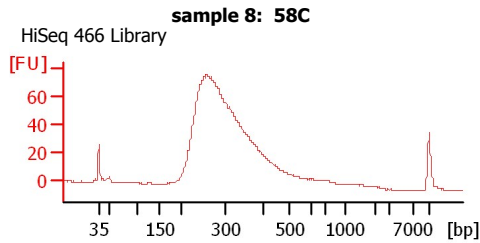
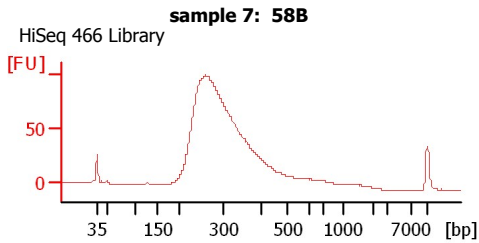
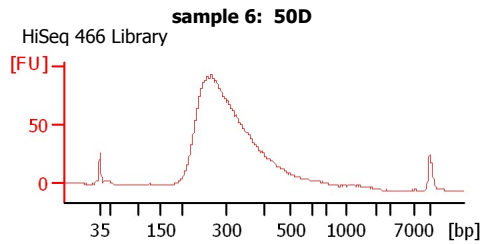
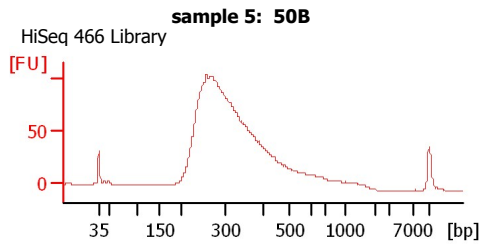
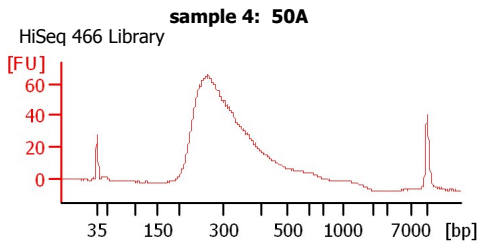
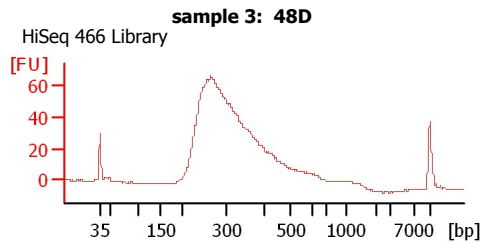
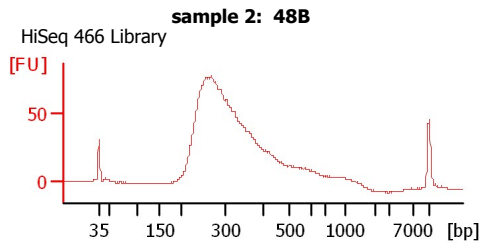
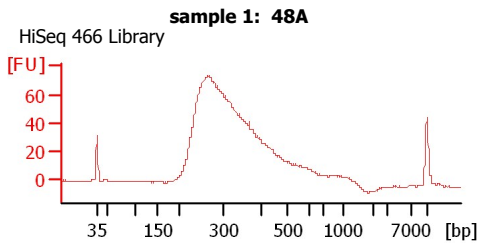
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



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Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1: 48A	HiSeq 466 Library	<input type="checkbox"/>	✓			
sample 2: 48B	HiSeq 466 Library	<input type="checkbox"/>	✓			
sample 3: 48D	HiSeq 466 Library	<input type="checkbox"/>	✓			
sample 4: 50A	HiSeq 466 Library	<input type="checkbox"/>	✓			
sample 5: 50B	HiSeq 466 Library	<input type="checkbox"/>	✓			
sample 6: 50D	HiSeq 466 Library	<input type="checkbox"/>	✓			
sample 7: 58B	HiSeq 466 Library	<input type="checkbox"/>	✓			
sample 8: 58C	HiSeq 466 Library	<input type="checkbox"/>	✓			
Isabele 1:5		<input type="checkbox"/>	✓			
Berg 3 1:5		<input type="checkbox"/>	✓			
Berg 3 1:5 (1:2)		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

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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

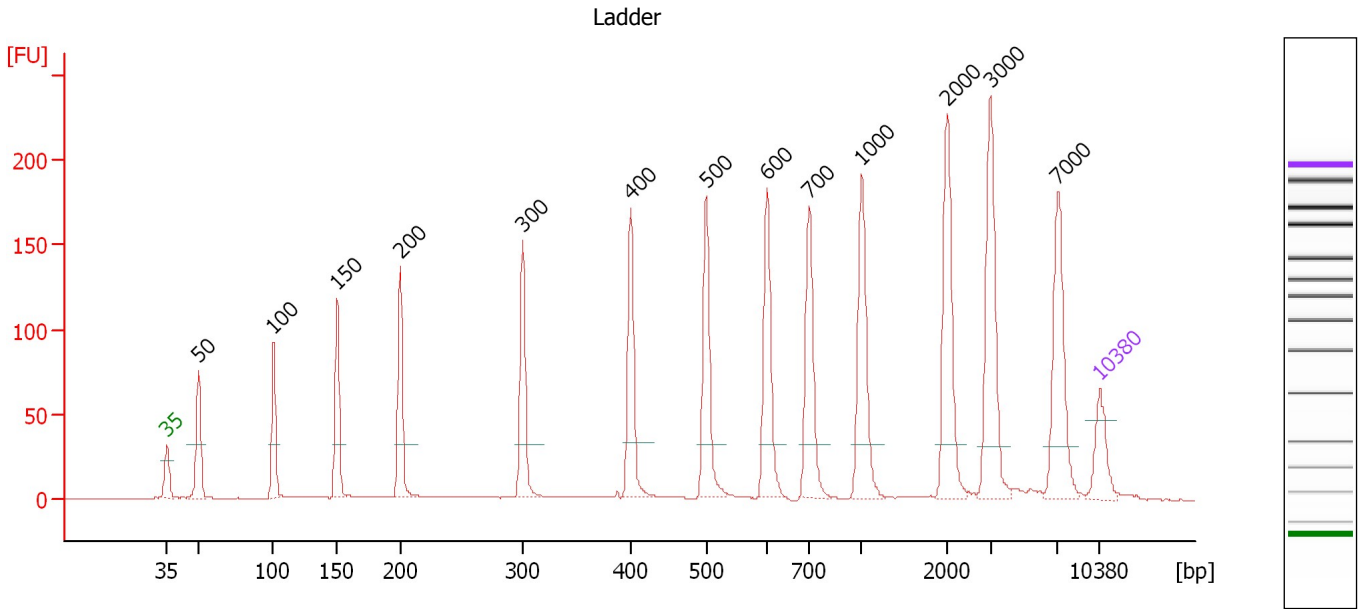
Ladder

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

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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

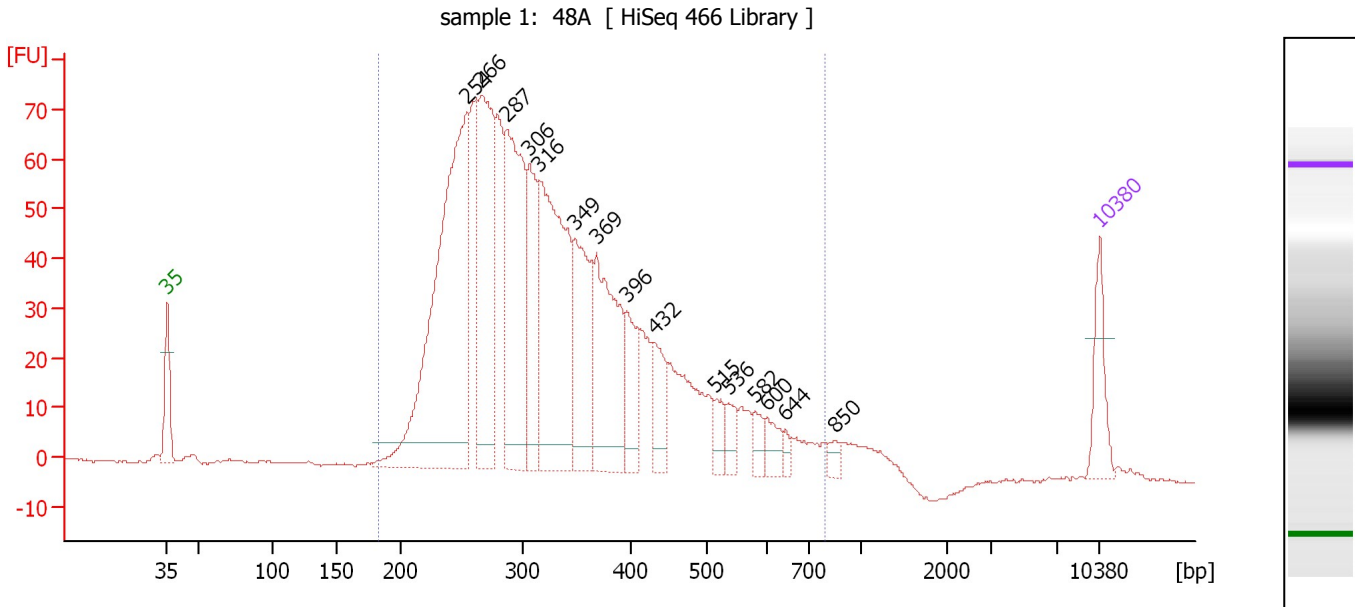
Peak table for Ladder

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	45.35
3	100	150.00	2,272.7	Ladder Peak	50.98
4	150	150.00	1,515.2	Ladder Peak	55.79
5	200	150.00	1,136.4	Ladder Peak	60.54
6	300	150.00	757.6	Ladder Peak	69.70
7	400	150.00	568.2	Ladder Peak	77.78
8	500	150.00	454.5	Ladder Peak	83.46
9	600	150.00	378.8	Ladder Peak	88.02
10	700	150.00	324.7	Ladder Peak	91.20
11	1,000	150.00	227.3	Ladder Peak	95.12
12	2,000	150.00	113.6	Ladder Peak	101.59
13	3,000	150.00	75.8	Ladder Peak	104.77
14	7,000	150.00	32.5	Ladder Peak	109.82
15	10,380	75.00	10.9	Upper Marker	113.00

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Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1: 48A

Number of peaks found: 15 Corr. Area 1: 1,487.5
 Noise: 0.2

Peak table for sample 1 : sample 1: 48A

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	254	1,007.08	6,000.8		65.51
3	266	509.54	2,900.6		66.60
4	287	502.61	2,651.4		68.53
5	306	242.10	1,197.4		70.21
6	316	574.43	2,758.6		70.95
7	349	279.46	1,214.8		73.62
8	369	336.40	1,382.2		75.25
9	396	117.16	447.9		77.48
10	432	100.24	351.4		79.61
11	515	43.60	128.2		84.16
12	536	40.02	113.1		85.10
13	582	32.94	85.8		87.18
14	600	41.02	103.6		88.02
15	644	16.38	38.6		89.40
16	850	19.26	34.3		93.16
17	10,380	75.00	10.9	Upper Marker	113.00

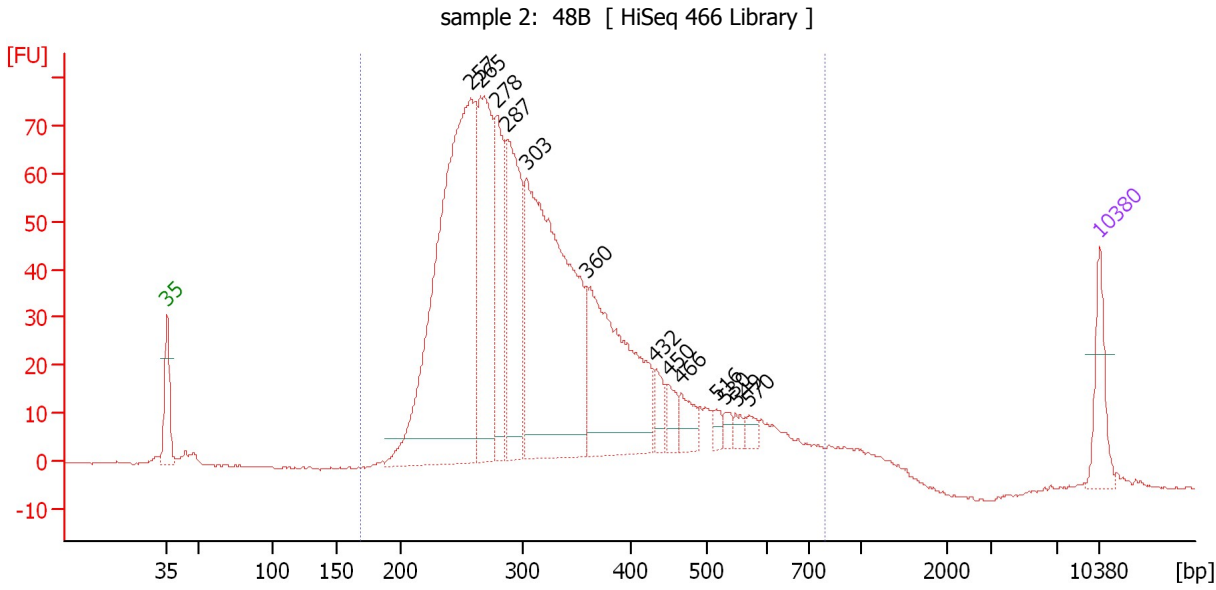
Region table for sample 1 : sample 1: 48A

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
183	786	338	1,487.5	22,890.0	4,635.31	98	29.8

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Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2: 48B

Number of peaks found: 13 Corr. Area 1: 1,490.8
 Noise: 0.2

Peak table for sample 2 : sample 2: 48B

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	257	1,284.56	7,564.1		65.79
3	265	476.63	2,720.5		66.53
4	278	265.81	1,446.2		67.73
5	287	366.91	1,935.8		68.52
6	303	980.68	4,908.7		69.92
7	360	502.83	2,116.6		74.54
8	432	47.86	167.7		79.62
9	450	43.22	145.6		80.61
10	466	54.91	178.3		81.56
11	516	19.74	58.0		84.19
12	530	16.76	47.9		84.84
13	549	16.68	46.1		85.69
14	570	20.96	55.8		86.63
15	10,380	75.00	10.9	Upper Marker	113.00

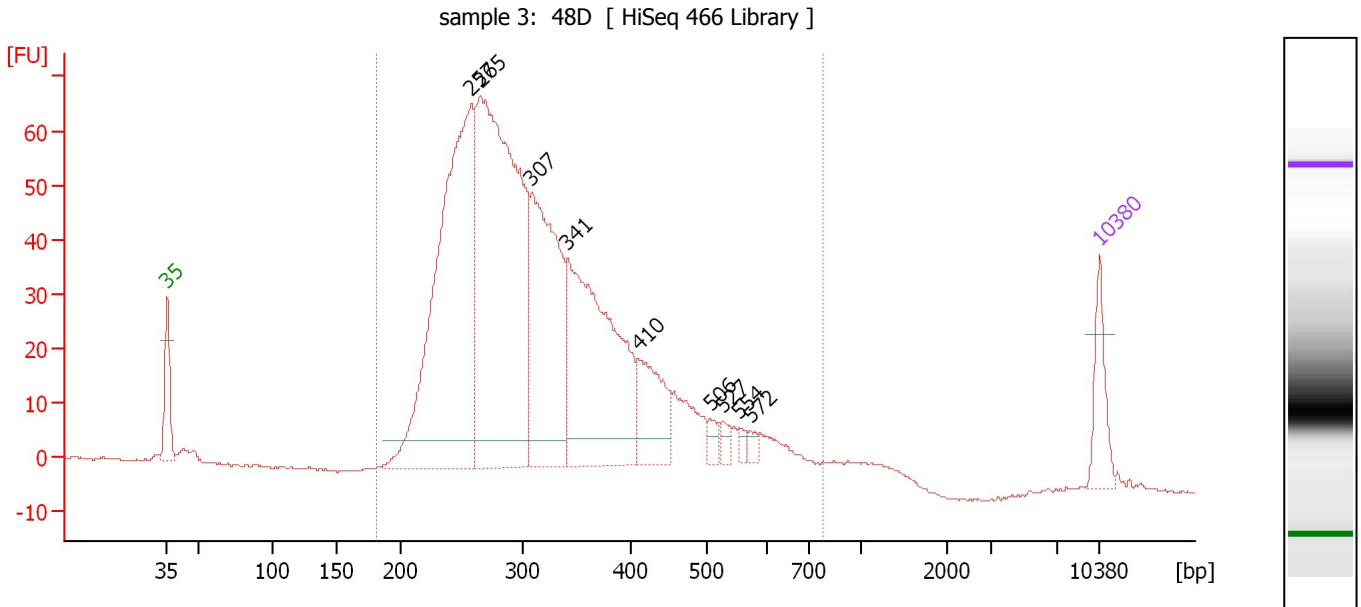
Region table for sample 2 : sample 2: 48B

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
168	786	335	1,490.8	23,193.7	4,624.31	97	31.1

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Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3: 48D

Number of peaks found: 9 Corr. Area 1: 1,237.5
 Noise: 0.2

Peak table for sample 3 : sample 3: 48D

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	257	1,176.10	6,932.4		65.76
3	265	1,353.17	7,728.2		66.52
4	307	605.56	2,984.8		70.29
5	341	706.97	3,140.8		73.01
6	410	173.68	641.7		78.35
7	506	23.69	70.9		83.74
8	527	21.30	61.2		84.70
9	554	15.32	41.9		85.91
10	572	15.39	40.7		86.76
11	10,380	75.00	10.9	Upper Marker	113.00

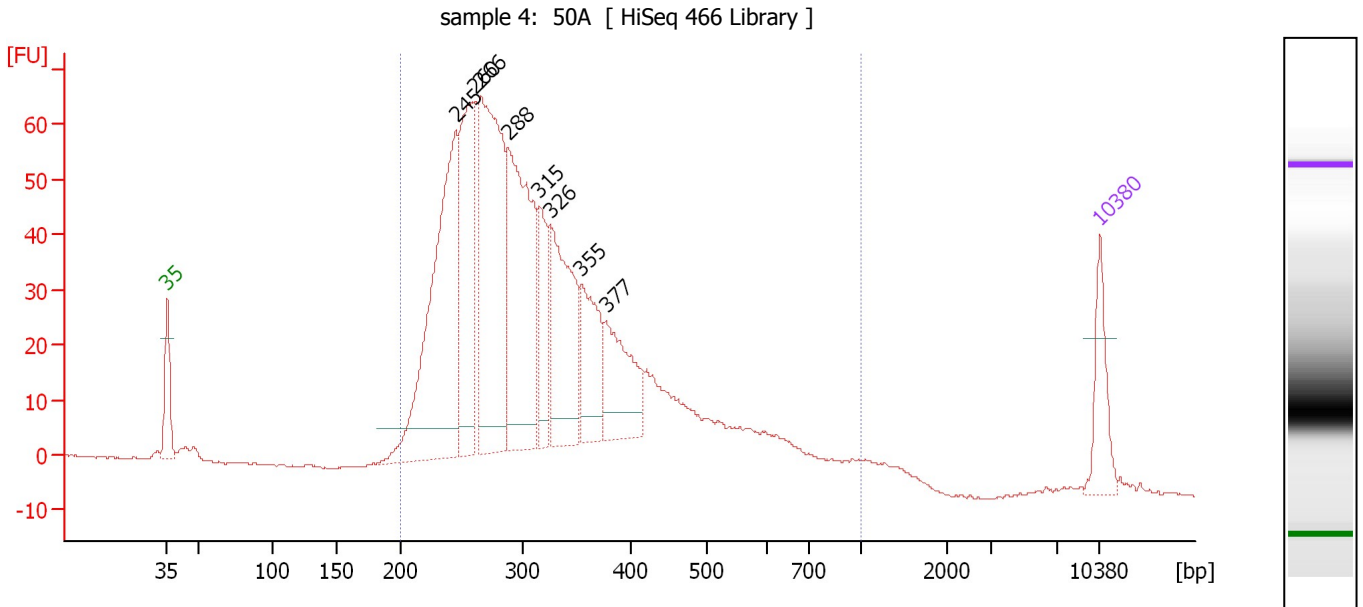
Region table for sample 3 : sample 3: 48D

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
182	781	329	1,237.5	21,746.6	4,318.54	98	28.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-29\2016-04-29_003.xad

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Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4: 50A

Number of peaks found: 8 Corr. Area 1: 1,244.5
 Noise: 0.2

Peak table for sample 4 : sample 4: 50A

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	245	671.19	4,144.0		64.70
3	260	366.48	2,136.3		66.03
4	266	614.48	3,506.5		66.54
5	288	490.60	2,582.3		68.58
6	315	134.96	648.4		70.94
7	326	300.52	1,396.2		71.81
8	355	163.23	697.4		74.11
9	377	177.38	712.1		75.95
10	10,380	75.00	10.9	Upper Marker	113.00

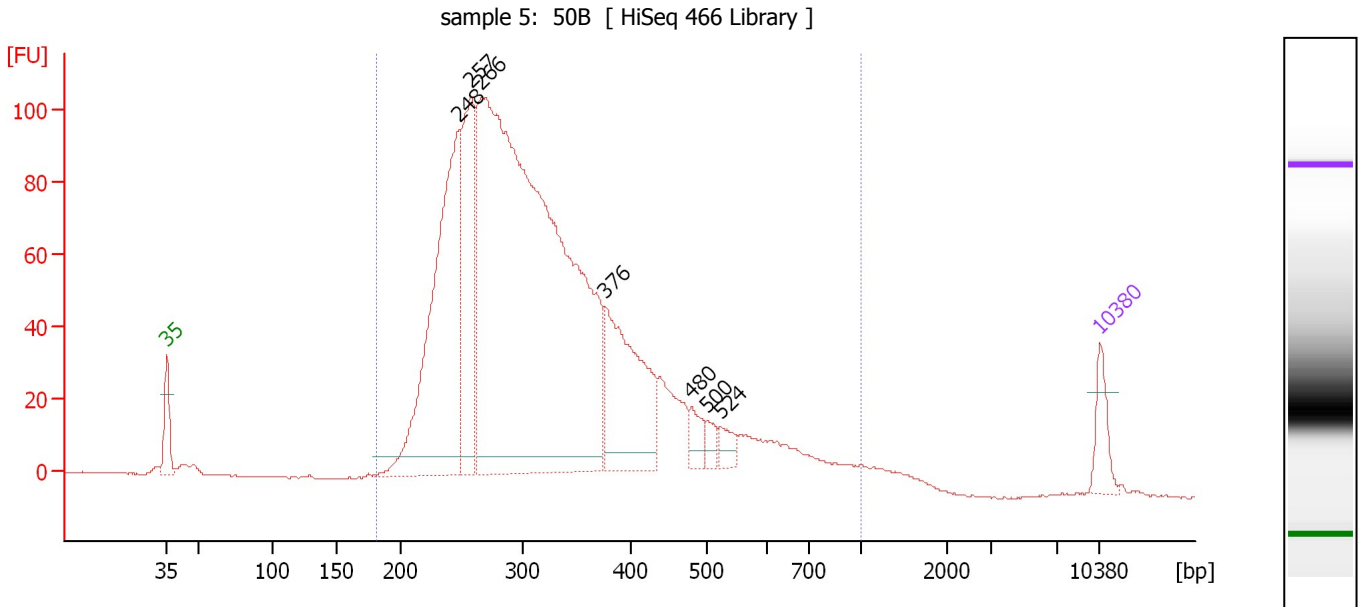
Region table for sample 4 : sample 4: 50A

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	336	1,244.5	18,648.3	3,712.35	98	34.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-29\2016-04-29_003.xad

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Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5: 50B

Number of peaks found: 7 Corr. Area 1: 2,030.6
 Noise: 0.2

Peak table for sample 5 : sample 5: 50B

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	248	1,209.36	7,389.7		64.93
3	257	586.73	3,458.6		65.76
4	266	3,788.72	21,571.3		66.59
5	376	550.76	2,219.1		75.84
6	480	65.12	205.4		82.34
7	500	41.07	124.3		83.48
8	524	50.72	146.5		84.57
9	10,380	75.00	10.9	Upper Marker	113.00

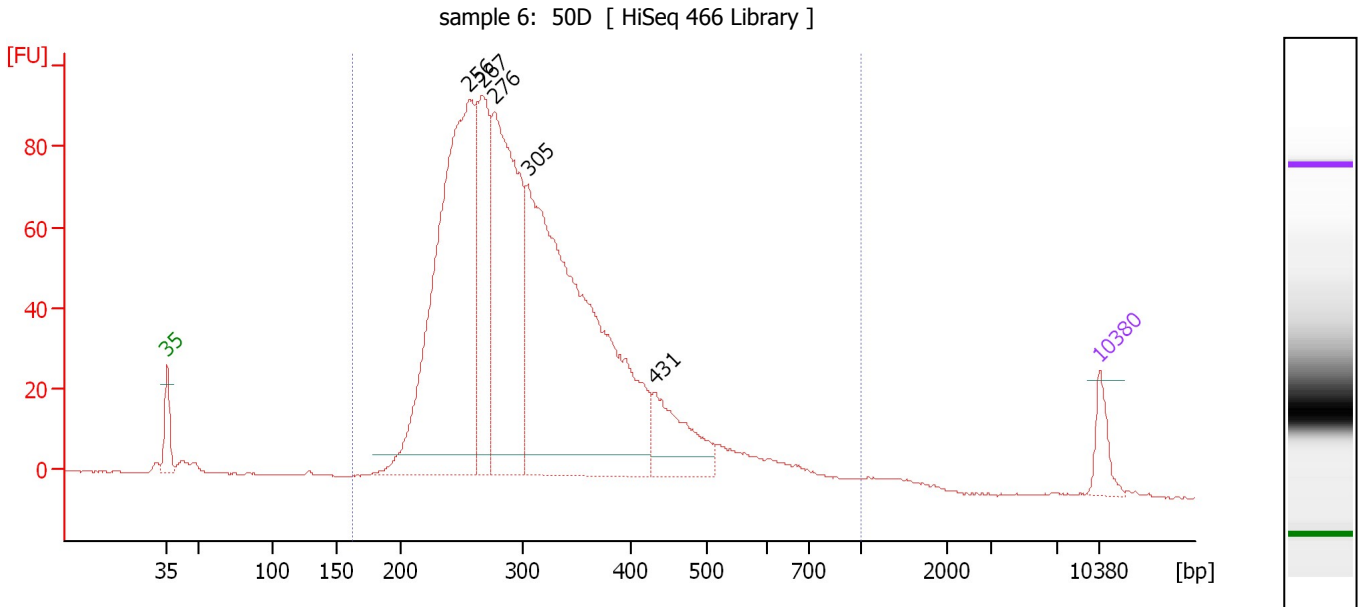
Region table for sample 5 : sample 5: 50B

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
181	1,000	339	2,030.6	33,790.8	6,773.23	98	34.4

Assay Class: High Sensitivity DNA Assay
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Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6: 50D

Number of peaks found: 5 Corr. Area 1: 1,674.3
 Noise: 0.2

Peak table for sample 6 : sample 6: 50D

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	256	2,126.77	12,568.0		65.70
3	267	636.10	3,605.7		66.70
4	276	1,311.56	7,187.7		67.54
5	305	2,486.74	12,371.7		70.06
6	431	301.53	1,060.7		79.52
7	10,380	75.00	10.9	Upper Marker	113.00

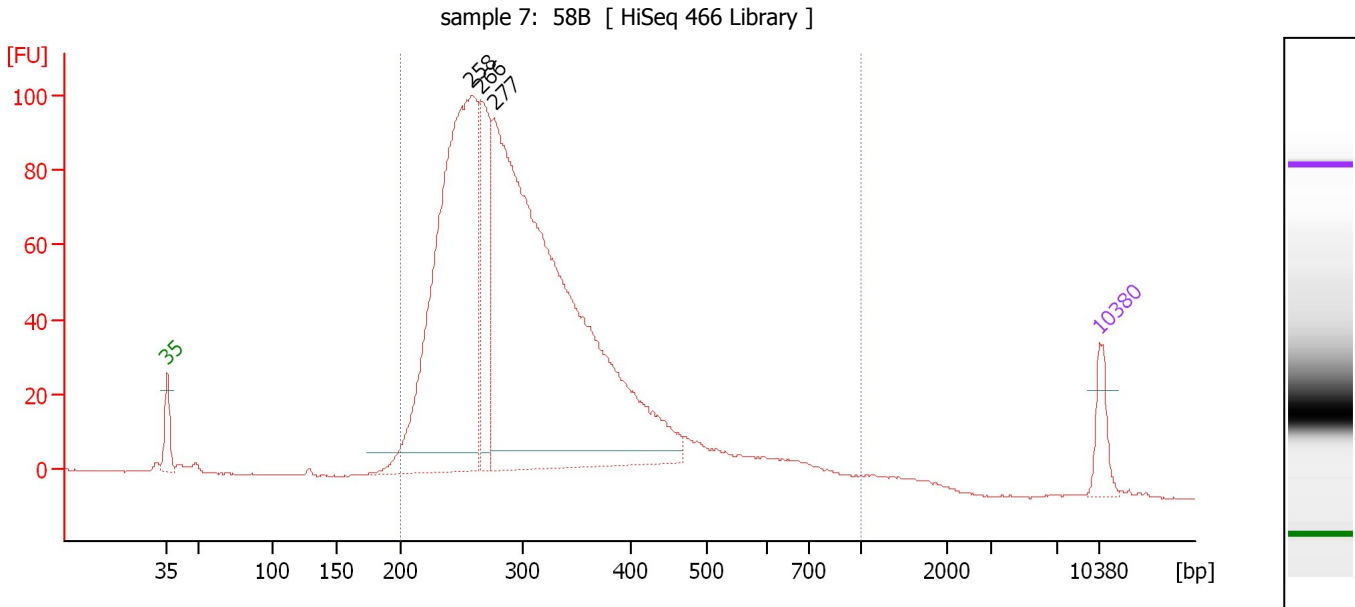
Region table for sample 6 : sample 6: 50D

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
162	1,000	321	1,674.3	36,637.4	7,134.69	98	29.8

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Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7: 58B

Number of peaks found: 3 Corr. Area 1: 1,694.7
 Noise: 0.2

Peak table for sample 7 : sample 7: 58B

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	258	1,942.95	11,408.8		65.85
3	266	406.37	2,313.0		66.60
4	277	3,094.85	16,947.5		67.56
5	10,380	75.00	10.9	Upper Marker	113.00

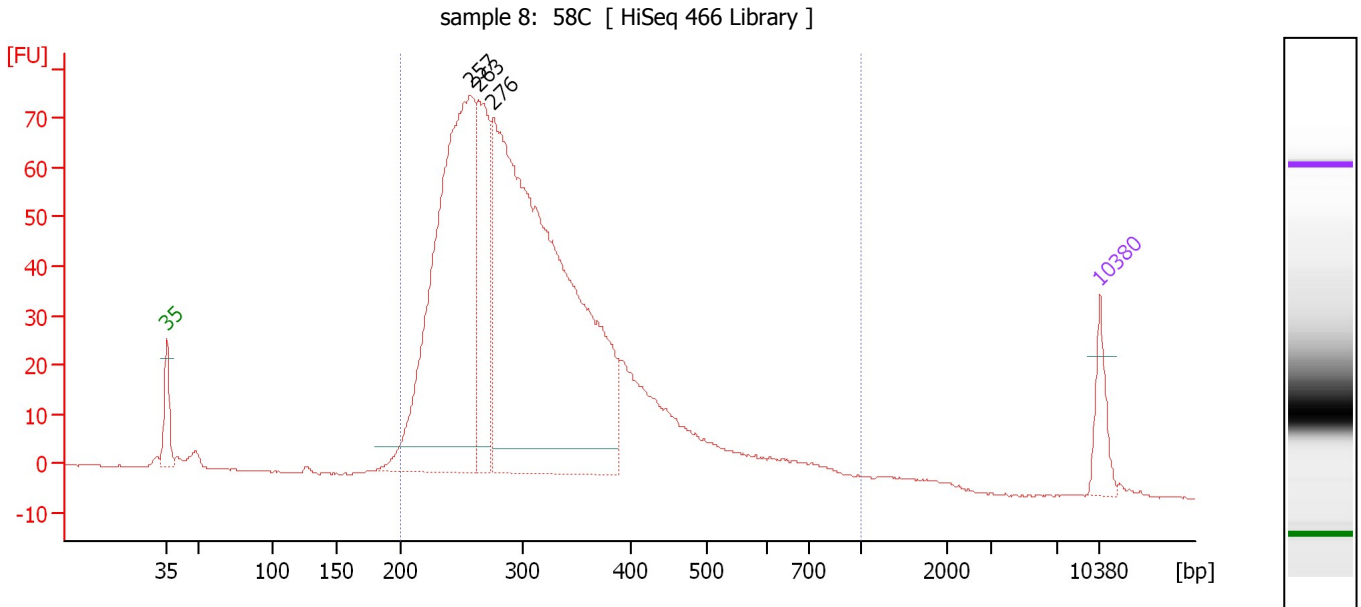
Region table for sample 7 : sample 7: 58B

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	320	1,694.7	30,153.8	5,827.23	98	31.7

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Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8: 58C

Number of peaks found: 3 Corr. Area 1: 1,308.7
 Noise: 0.2

Peak table for sample 8 : sample 8: 58C

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	257	1,621.50	9,545.4		65.79
3	263	445.28	2,562.5		66.33
4	276	2,499.85	13,740.2		67.47
5	10,380	75.00	10.9	Upper Marker	113.00

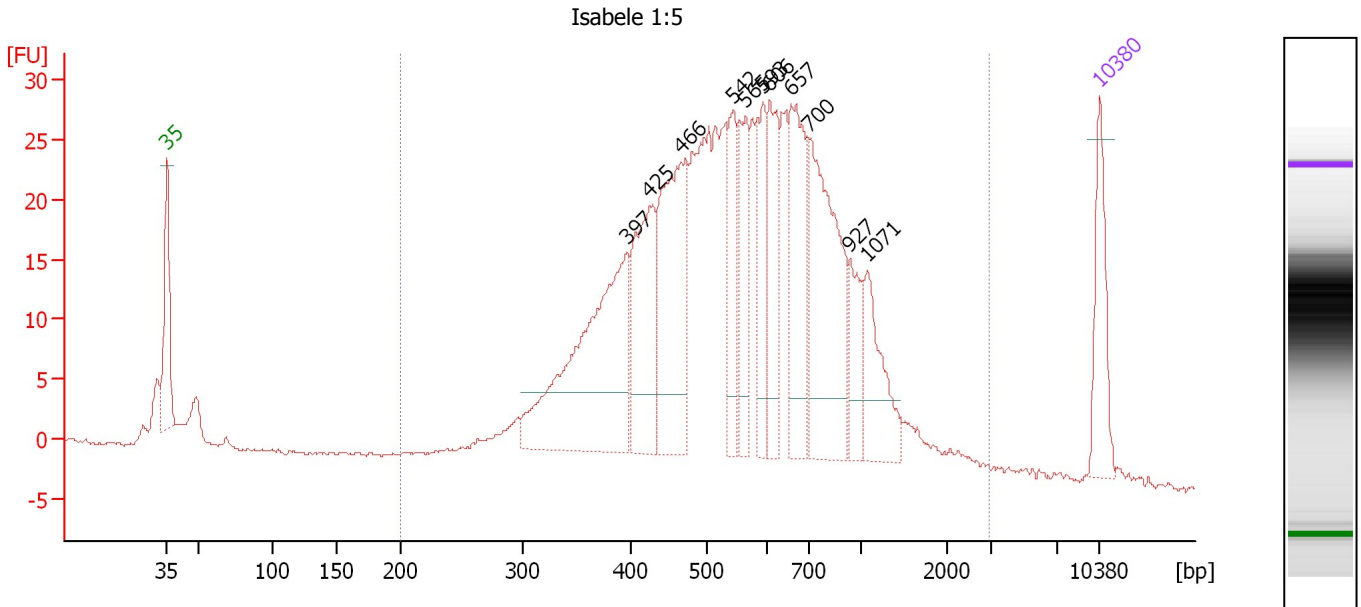
Region table for sample 8 : sample 8: 58C

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	320	1,308.7	25,840.9	5,012.13	98	30.3

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Electropherogram Summary Continued ...



Overall Results for sample 9 : Isabele 1:5

Number of peaks found: 11 Corr. Area 1: 653.6
 Noise: 0.1

Peak table for sample 9 : Isabele 1:5

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	397	380.92	1,452.5		77.57
3	425	194.20	692.5		79.19
4	466	276.75	899.9		81.53
5	542	98.84	276.3		85.38
6	565	101.86	273.3		86.41
7	593	87.34	223.0		87.71
8	606	119.99	300.1		88.20
9	657	165.00	380.6		89.83
10	700	274.50	594.6		91.19
11	927	61.14	99.9		94.17
12	1,071	97.75	138.3		95.58
13	10,380	75.00	10.9	Upper Marker	113.00

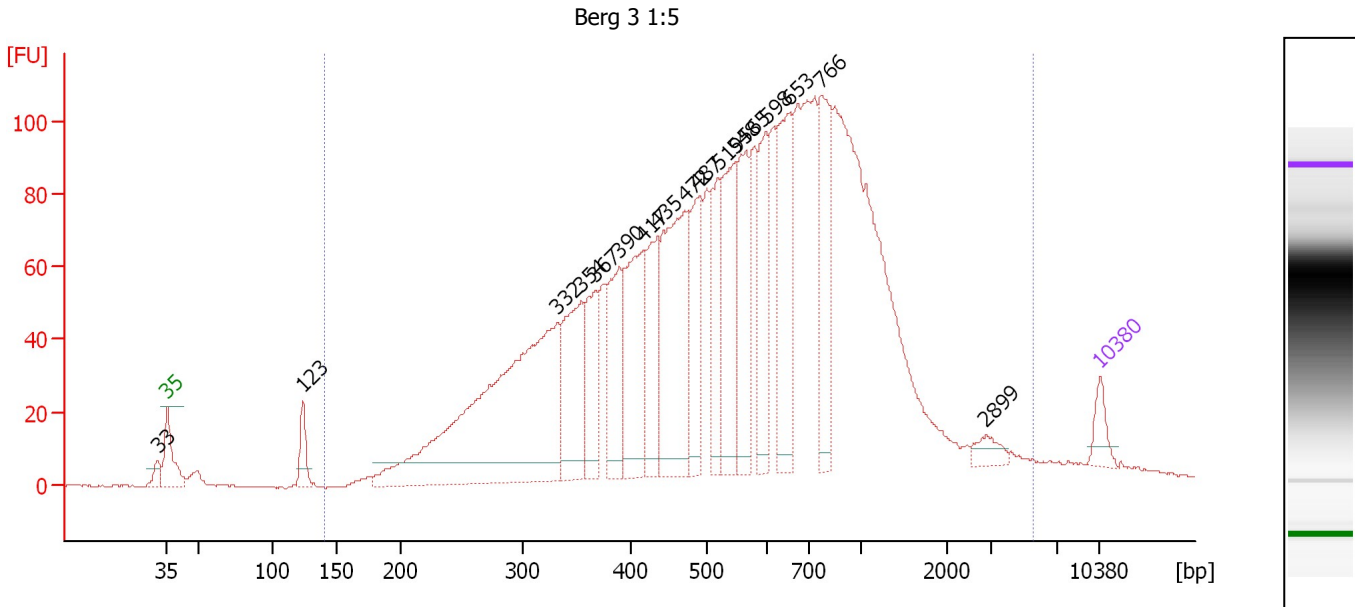
Region table for sample 9 : Isabele 1:5

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	2,982	621	653.6	7,790.2	2,650.19	97	47.9

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Electropherogram Summary Continued ...



Overall Results for sample 10 : Berg 3 1:5

Number of peaks found: 17 Corr. Area 1: 2,908.8
 Noise: 0.4

Peak table for sample 10 : Berg 3 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.29
2	35	125.00	5,411.3	Lower Marker	43.00
3	123	151.26	1,862.8		53.20
4	332	2,217.17	10,122.9		72.27
5	354	575.95	2,463.5		74.08
6	367	361.81	1,493.2		75.12
7	390	440.58	1,713.9		76.93
8	417	626.29	2,276.1		78.74
9	435	374.09	1,302.3		79.78
10	472	950.68	3,052.5		81.86
11	487	445.53	1,385.2		82.74
12	519	331.15	966.6		84.33
13	548	560.94	1,551.0		85.65
14	565	468.53	1,256.9		86.41
15	598	390.80	989.3		87.95
16	653	582.18	1,350.9		89.70
17	766	533.54	1,055.7		92.06
18	2,899	66.60	34.8		104.45
19	10,380	75.00	10.9	Upper Marker	113.00

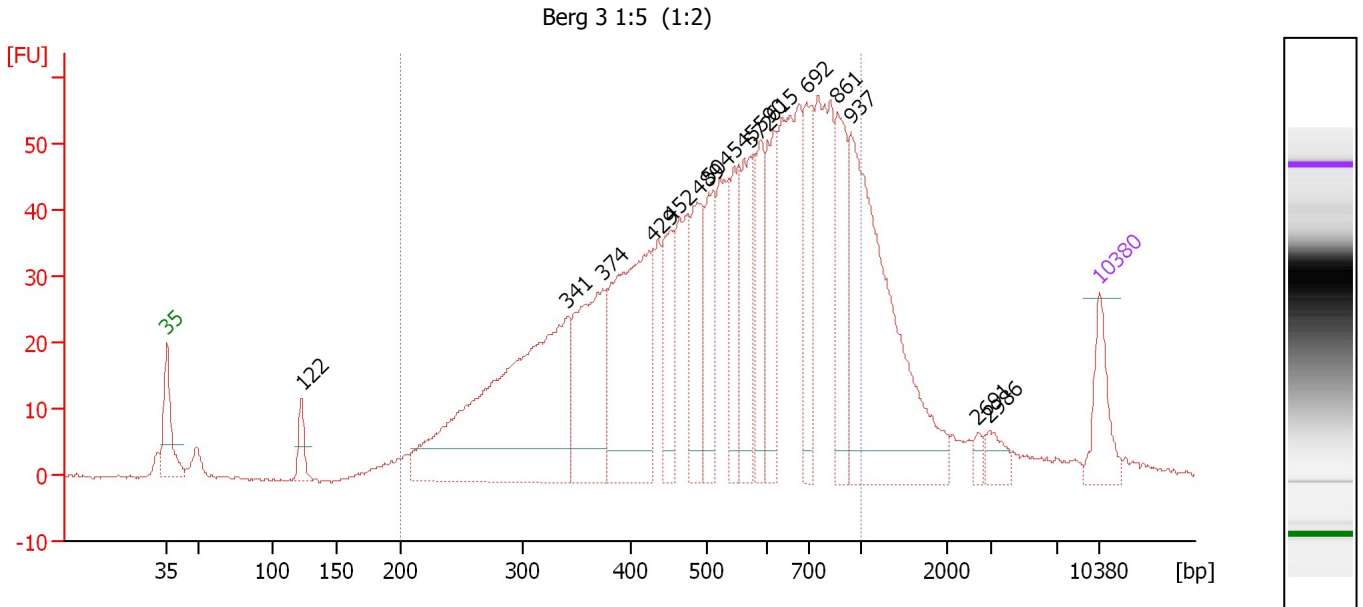
Region table for sample 10 : Berg 3 1:5

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
140	5,494	715	2,908.8	46,987.2	14,619.18	96	82.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-29\2016-04-29_003.xad

Created: 4/29/2016 3:10:36 PM
 Modified: 4/29/2016 3:58:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Berg 3 1:5 (1:2)

Number of peaks found: 16 Corr. Area 1: 1,316.9
 Noise: 0.3

Peak table for sample 11 : Berg 3 1:5 (1:2)

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	122	53.66	666.5		53.09
3	341	844.74	3,753.8		73.01
4	374	321.49	1,301.0		75.71
5	429	464.94	1,643.5		79.41
6	452	143.21	480.1		80.73
7	489	173.25	537.0		82.83
8	504	149.05	447.9		83.65
9	545	124.00	344.5		85.53
10	572	170.46	451.5		86.74
11	590	135.04	346.7		87.57
12	615	166.24	409.3		88.51
13	692	151.44	331.8		90.94
14	861	169.63	298.4		93.31
15	937	580.09	937.8		94.30
16	2,691	12.59	7.1		103.79
17	2,986	31.78	16.1		104.73
18	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : Berg 3 1:5 (1:2)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	543	1,316.9	15,170.4	4,489.20	83	35.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-29\2016-04-29_003.xad

Created: 4/29/2016 3:10:36 PM
Modified: 4/29/2016 3:58:14 PM

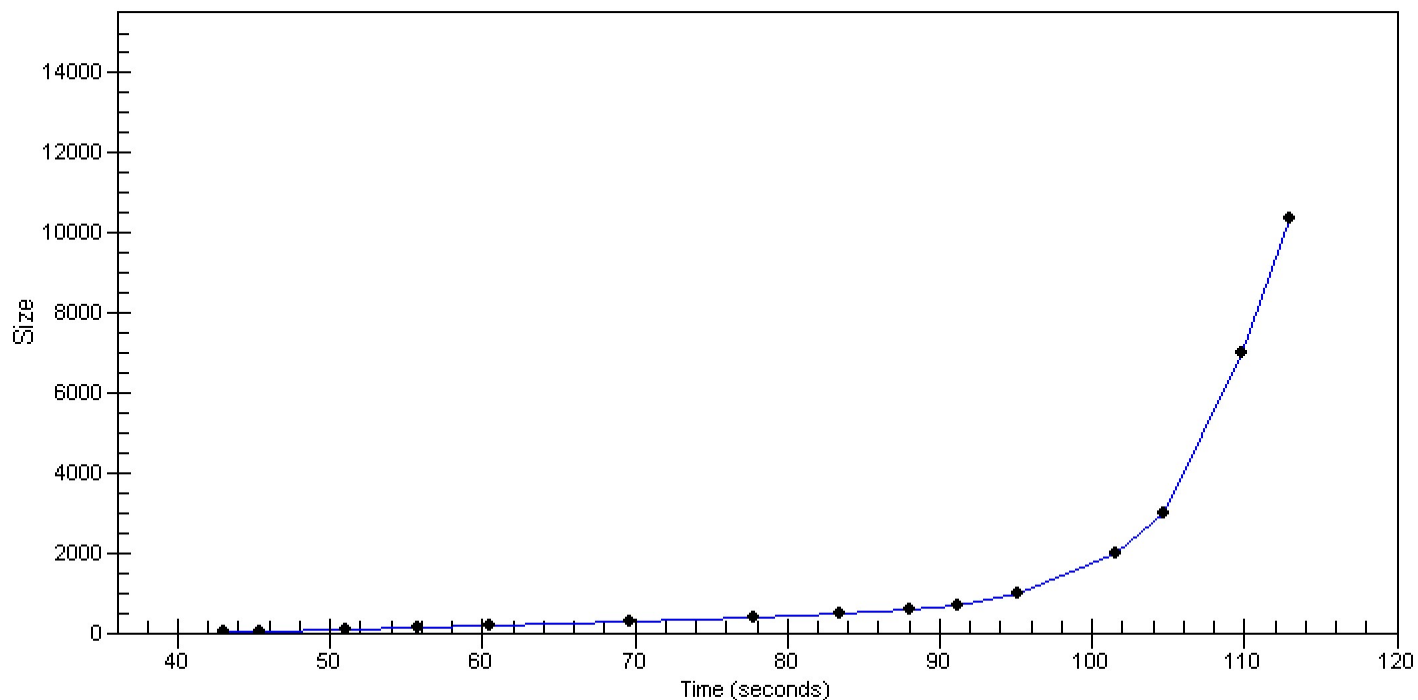
Gel Image

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-29\2016-04-29_003.xad

Created: 4/29/2016 3:10:36 PM
Modified: 4/29/2016 3:58:14 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-29\2016-04-29_003.xad

Created: 4/29/2016 3:10:36 PM
 Modified: 4/29/2016 3:58:14 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		4/29/2016 3:51:54 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-04-29\2016-04-29_003.xad)		Instrument	Run		4/29/2016 3:10:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/29/2016 3:10:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/29/2016 3:10:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/29/2016 3:10:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/29/2016 3:10:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/29/2016 3:10:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/29/2016 3:10:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1