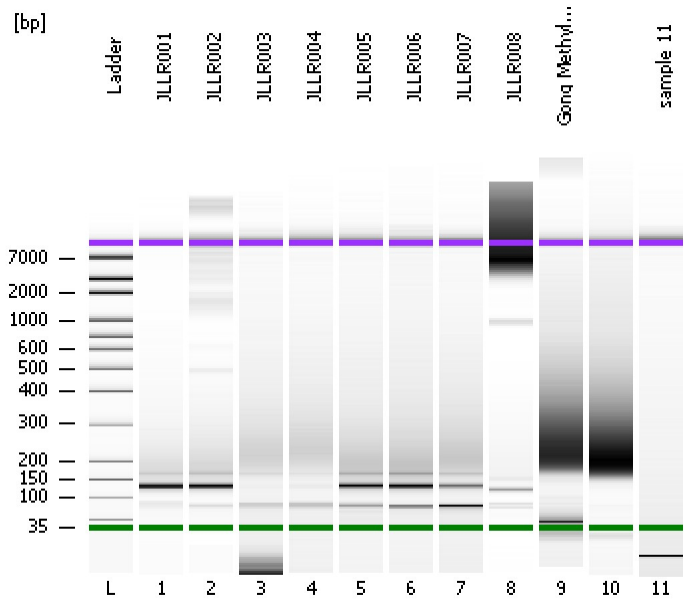
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

Electrophoresis File Run Summary



Instrument Information:

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

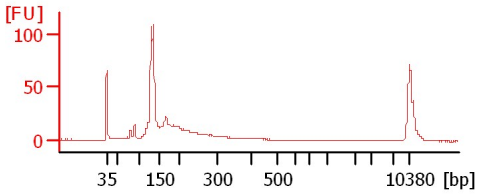
Assay Information:

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

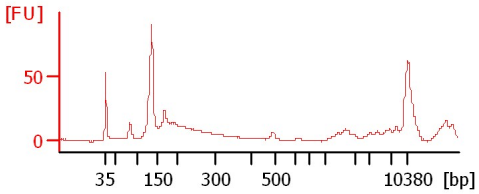
Chip Information:

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

JLLR001



JLLR002



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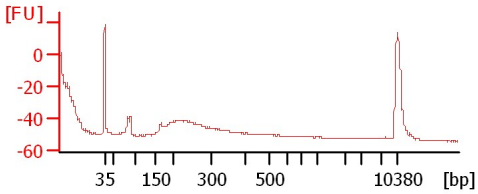
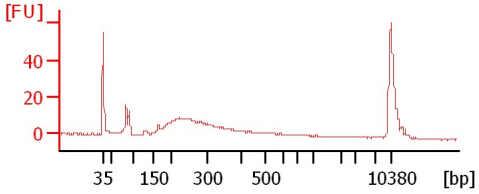
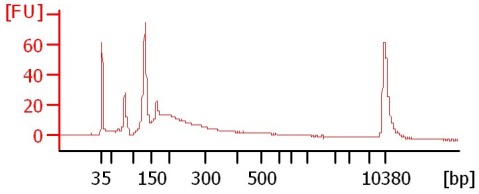


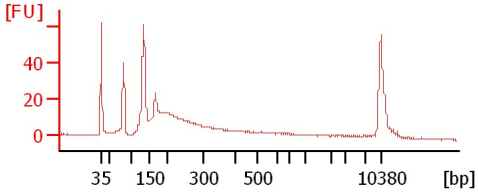
JLLR004



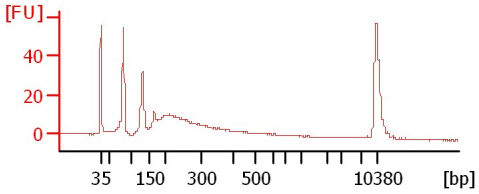
JLLR005



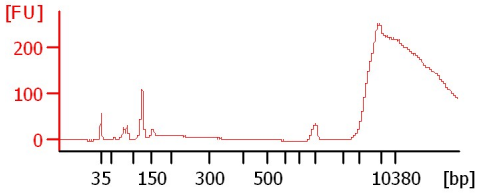
JLLR006



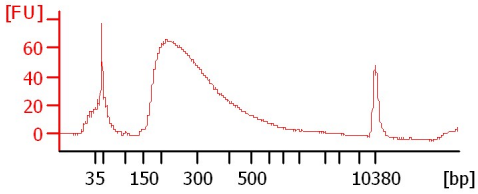
JLLR007



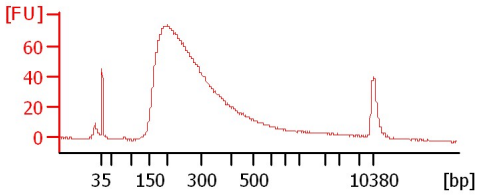
JLLR008

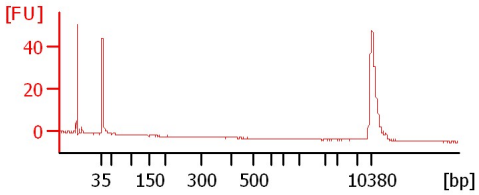


Gong Methylseq 1



sample 11





Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
JLLR001		☐	✓			
JLLR002		☐	✓			
JLLR003		☐	✓			
JLLR004		☐	✓			
JLLR005		☐	✓			
JLLR006		☐	✓			
JLLR007		☐	✓			
JLLR008		☐	✓			
Gong Methylseq 1		☐	✓			
		☐	✓			
sample 11		☐	✓			
Ladder		☐	✓			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 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

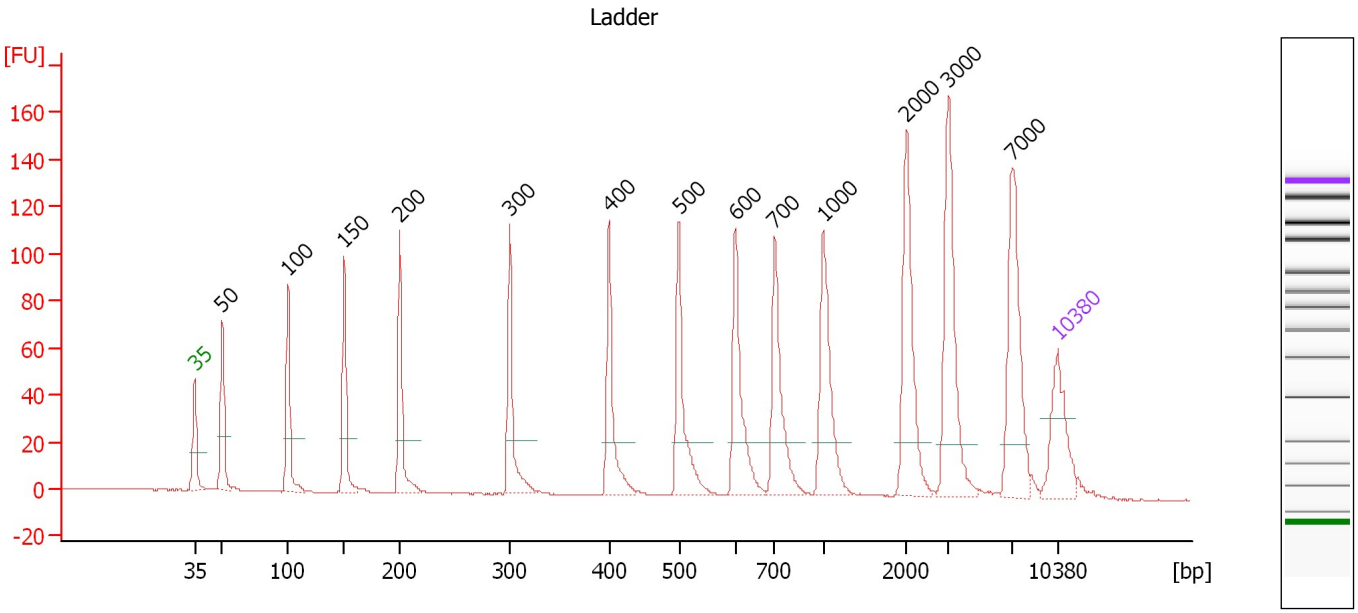
Ladder

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\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

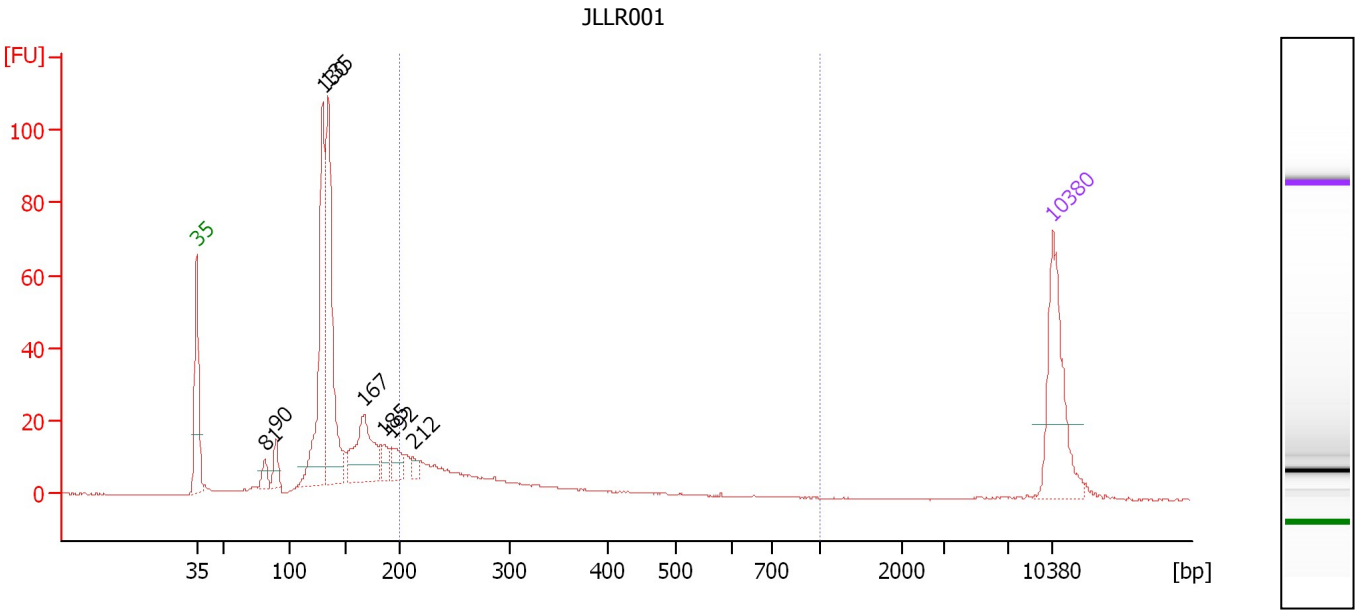
Peak table for Ladder

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	45.25
3		100	150.00	2,272.7	Ladder Peak	50.57
4		150	150.00	1,515.2	Ladder Peak	55.15
5		200	150.00	1,136.4	Ladder Peak	59.65
6		300	150.00	757.6	Ladder Peak	68.55
7		400	150.00	568.2	Ladder Peak	76.59
8		500	150.00	454.5	Ladder Peak	82.26
9		600	150.00	378.8	Ladder Peak	86.84
10		700	150.00	324.7	Ladder Peak	90.04
11		1,000	150.00	227.3	Ladder Peak	93.98
12		2,000	150.00	113.6	Ladder Peak	100.72
13		3,000	150.00	75.8	Ladder Peak	104.14
14		7,000	150.00	32.5	Ladder Peak	109.28
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : JLLR001

Number of peaks found:	8	Corr. Area 1:	146.0
Noise:	0.2		

Peak table for sample 1 : JLLR001

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	81	15.38	286.4		48.58
3	90	22.20	375.6		49.45
4	130	192.30	2,245.7		53.29
5	135	201.77	2,264.9		53.77
6	167	88.22	801.8		56.65
7	185	16.75	137.1		58.31
8	192	20.29	160.2		58.92
9	212	7.36	52.6		60.71
10	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 1 : JLLR001

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	290	1,000	146.0	1,080.3	24	32.1	188.57	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

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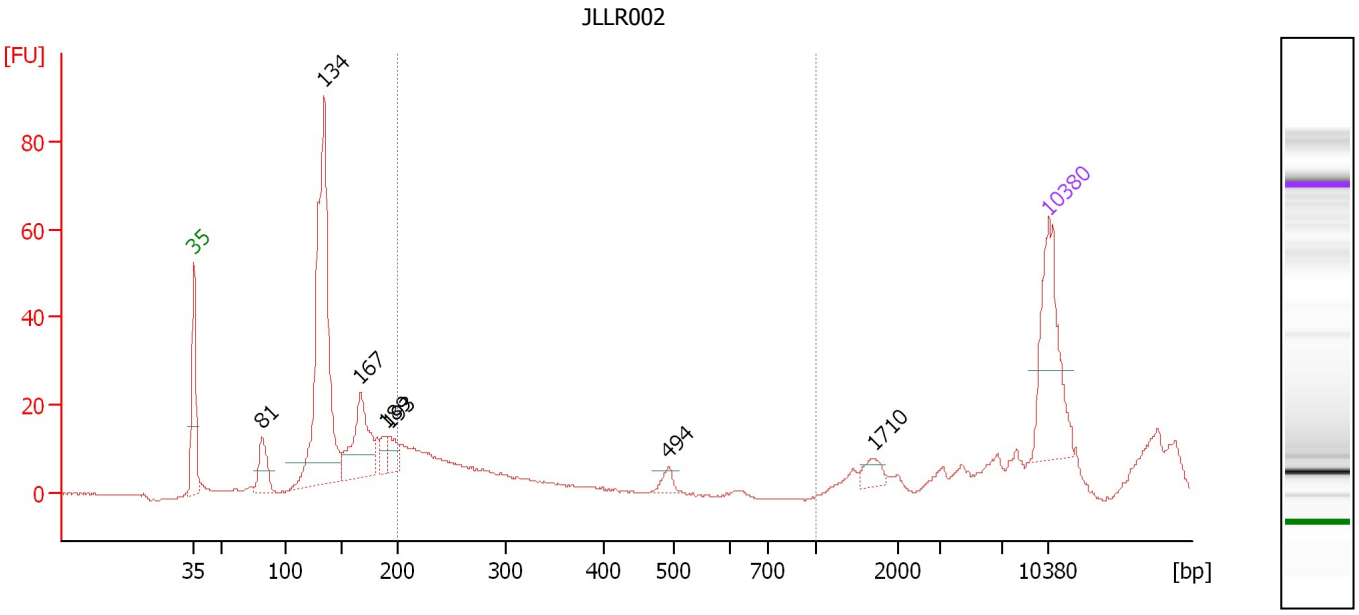
Electropherogram Summary Continued ...



Overall Results for sample 2 : JLLR002

Number of peaks found:	7	Corr. Area 1:	103.4
Noise:	0.2		

Peak table for sample 2 : JLLR002

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	81	40.73	758.0		48.59
3	134	355.22	4,011.4		53.70
4	167	92.70	841.6		56.67
5	189	13.68	109.5		58.68
6	193	18.87	148.0		59.03
7	494	9.58	29.4		81.91
8	1,710	11.18	9.9		98.76
9	10,380	75.00	10.9	Upper Marker	113.00

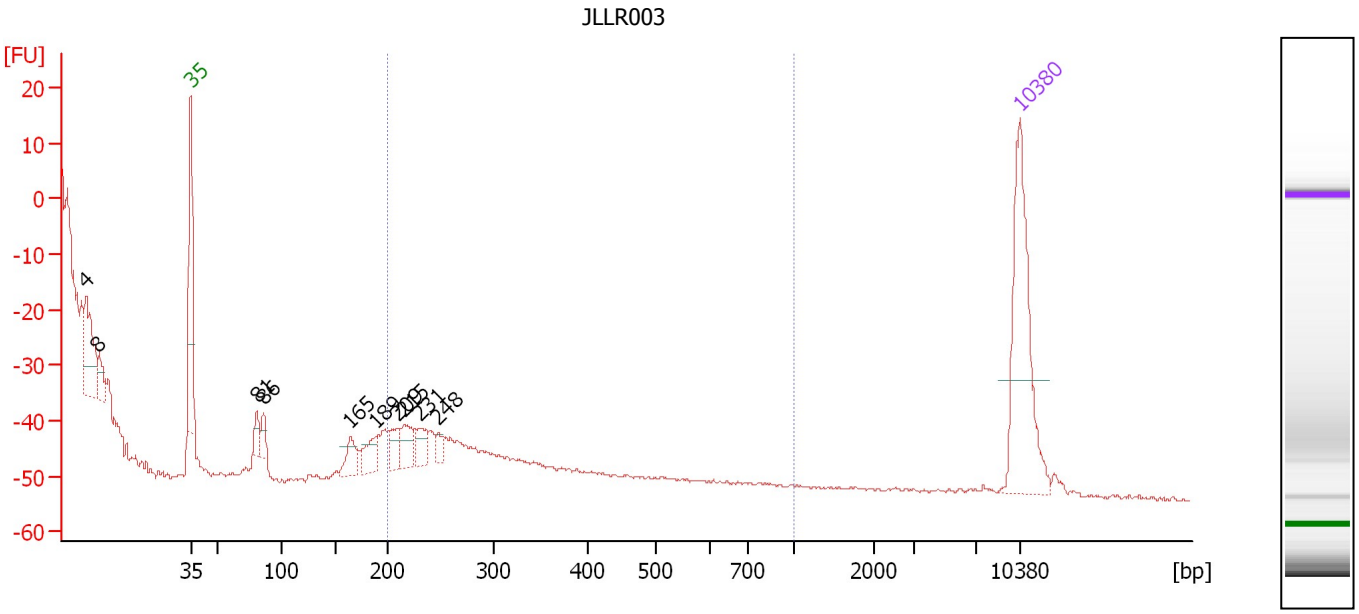
Region table for sample 2 : JLLR002

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	257	1,000	103.4	950.3	21	23.5	155.01	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : JLLR003

Number of peaks found:	10	Corr. Area 1:	0.0
Noise:	0.3		

Peak table for sample 3 : JLLR003

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	4	0.00	0.0		34.13
2	8	0.00	0.0		35.16
3	35	125.00	5,411.3	Lower Marker	43.00
4	81	12.32	230.6		48.54
5	86	11.73	205.5		49.13
6	165	18.97	174.6		56.47
7	189	20.10	160.9		58.68
8	209	15.61	113.3		60.43
9	215	19.47	137.3		60.97
10	231	16.71	109.8		62.37
11	248	6.39	39.1		63.90
12	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 3 : JLLR003

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

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

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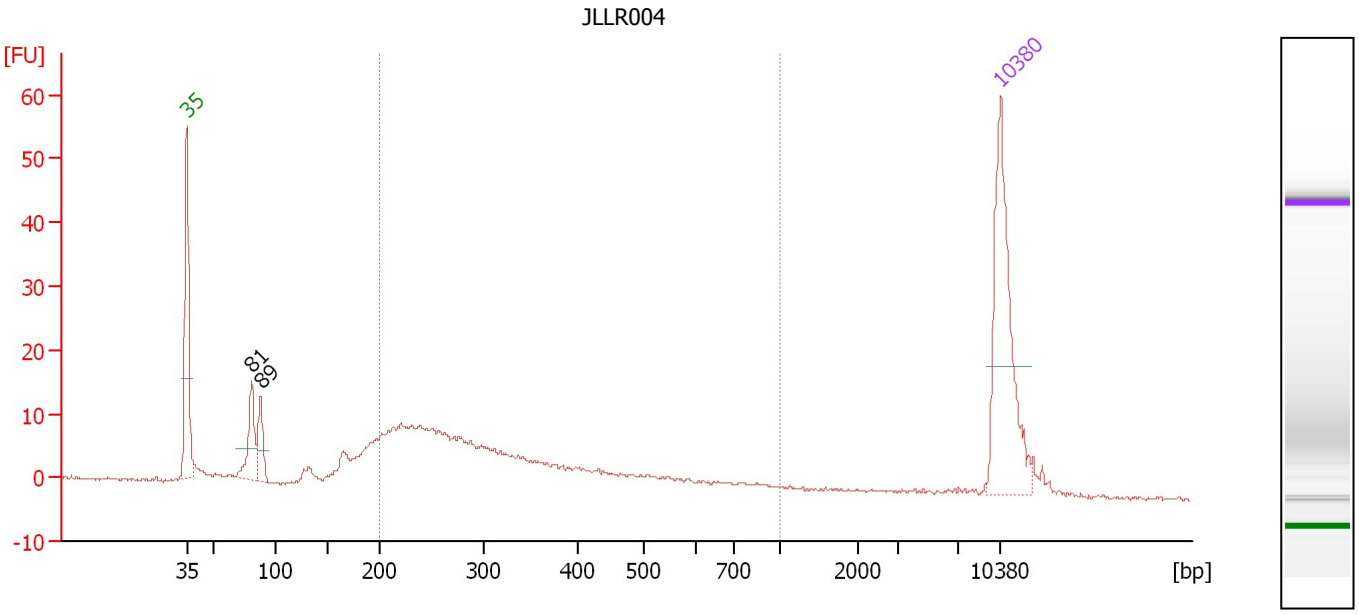
Modified: 4/22/2015 12:20:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : JLLR004

Number of peaks found:	2	Corr. Area 1:	195.6
Noise:	0.2		

Peak table for sample 4 : JLLR004

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	81	37.32	694.0		48.60
3	89	25.20	430.0		49.38
4	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 4 : JLLR004

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	335	1,000	195.6	1,374.5	67	40.7	261.26	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

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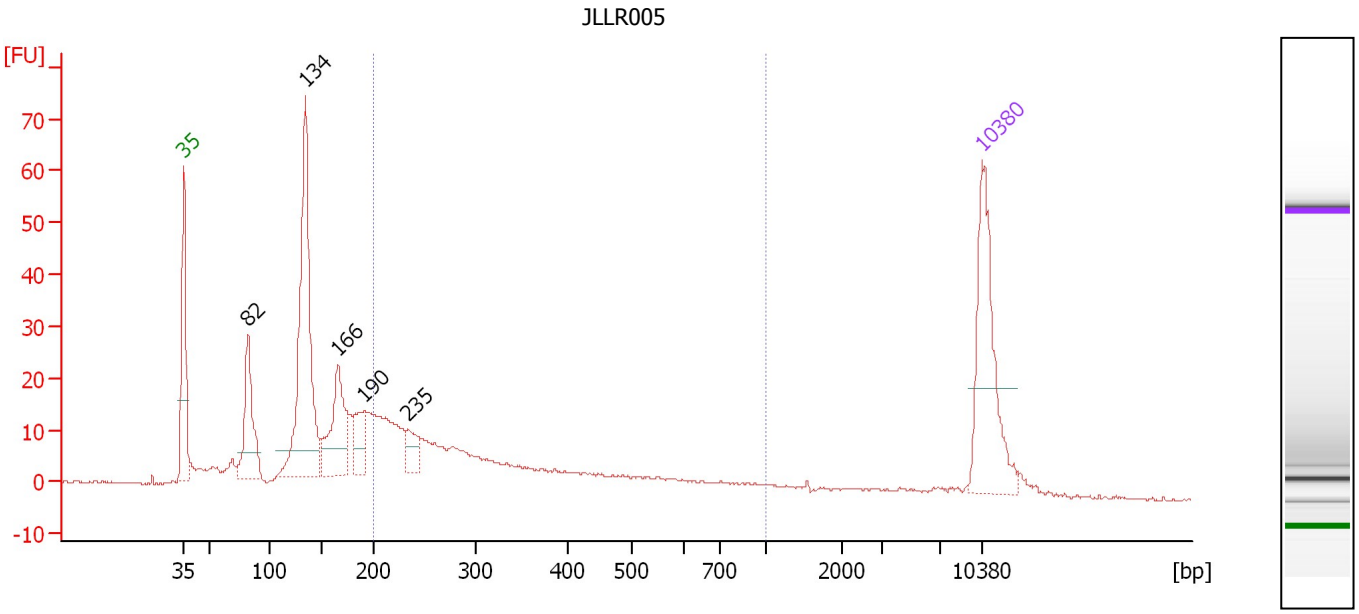

Overall Results for sample 5 : JLLR005

Number of peaks found:	5	Corr. Area 1:	245.5
Noise:	0.2		

Peak table for sample 5 : JLLR005

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	82	78.48	1,449.7		48.65
3	134	226.46	2,566.6		53.65
4	166	79.62	728.6		56.55
5	190	31.82	253.8		58.75
6	235	19.78	127.8		62.72
7	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 5 : JLLR005

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	348	1,000	245.5	1,596.1	38	45.0	302.83	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

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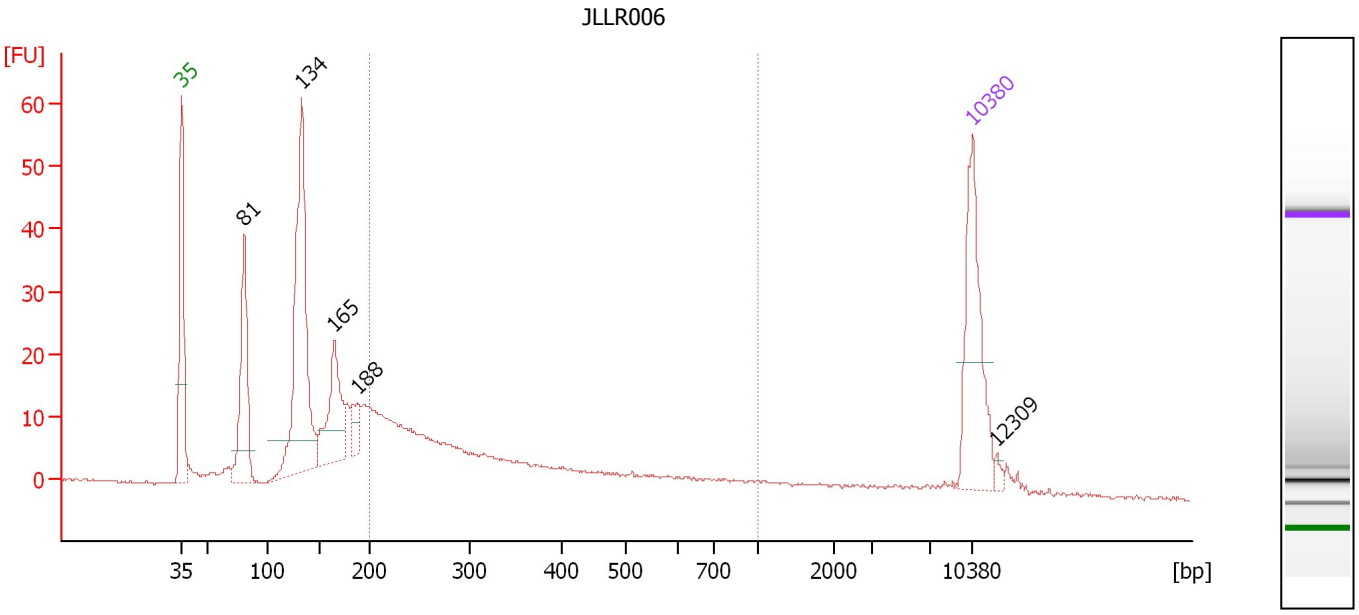

Overall Results for sample 6 : JLLR006

Number of peaks found:	5	Corr. Area 1:	215.9
Noise:	0.2		

Peak table for sample 6 : JLLR006

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	81	117.96	2,201.2		48.57
3	134	242.46	2,746.6		53.66
4	165	82.55	756.1		56.54
5	188	20.89	168.3		58.57
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,309	0.00	0.0		115.12

Region table for sample 6 : JLLR006

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	353	1,000	215.9	1,721.8	38	45.5	329.52	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

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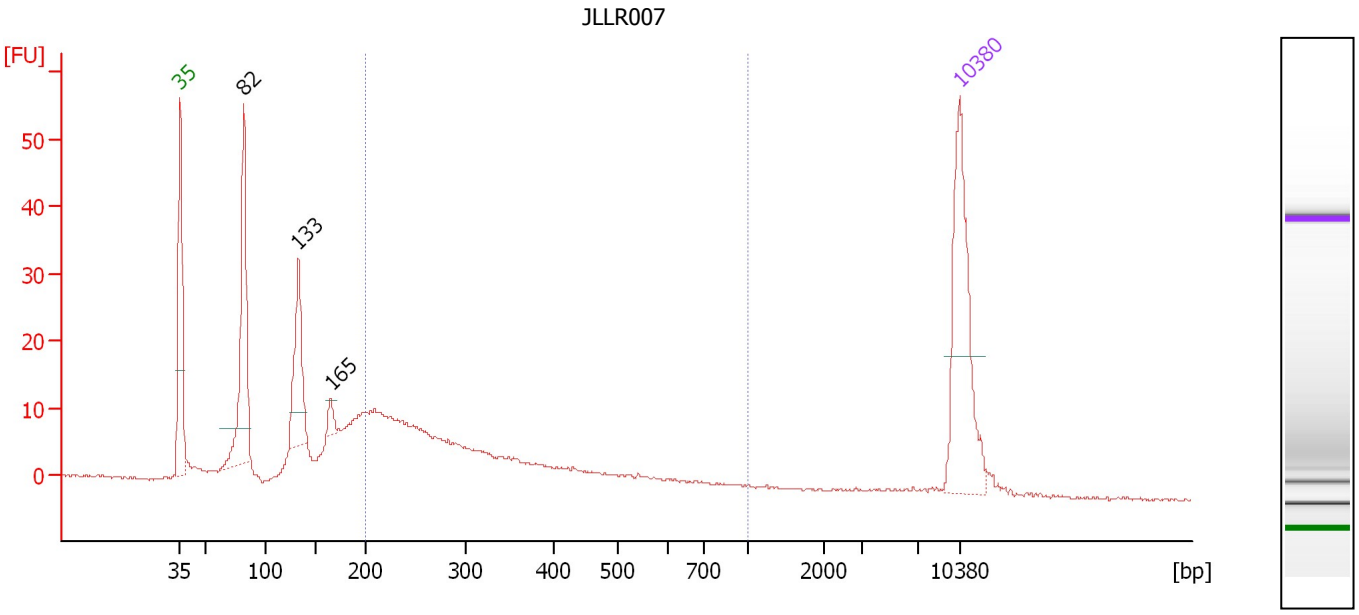

Overall Results for sample 7 : JLLR007

Number of peaks found:	3	Corr. Area 1:	199.7
Noise:	0.2		

Peak table for sample 7 : JLLR007

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	82	128.40	2,360.1		48.70
3	133	70.72	806.3		53.58
4	165	8.95	82.1		56.50
5	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 7 : JLLR007

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	332	1,000	199.7	1,491.3	45	41.0	279.73	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

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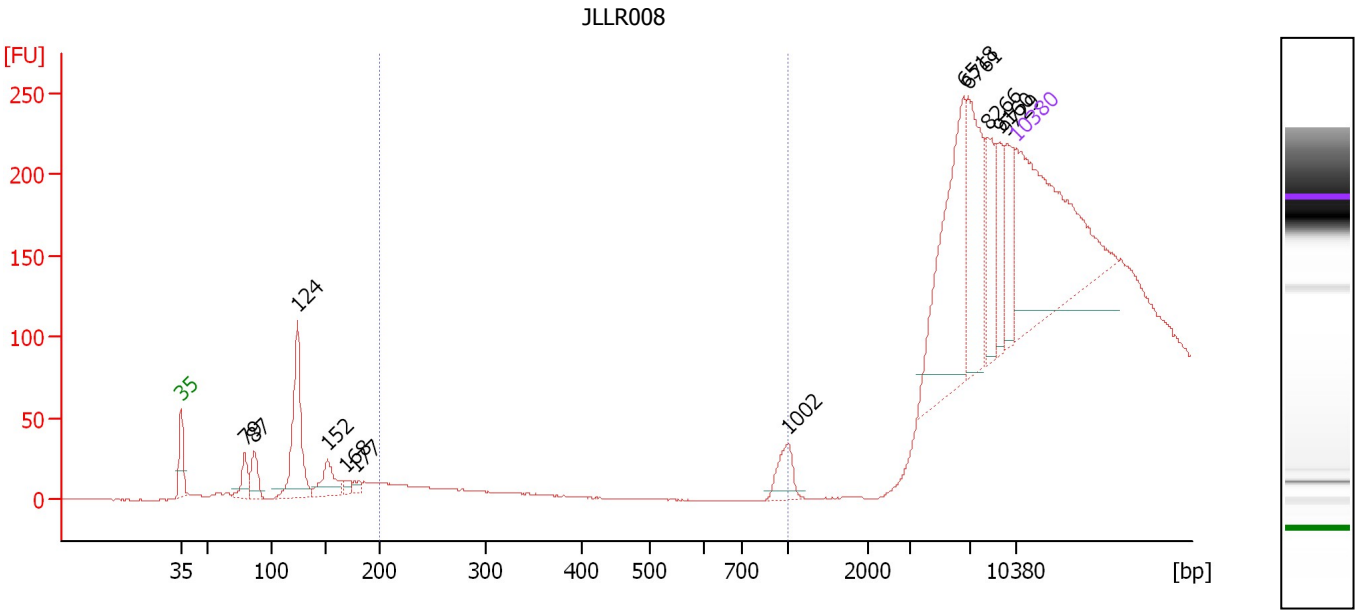

Overall Results for sample 8 : JLLR008

Number of peaks found:	12	Corr. Area 1:	0.0
Noise:	0.2		

Peak table for sample 8 : JLLR008

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	79	12.45	237.8		48.37
3	87	13.29	231.7		49.17
4	124	54.15	662.5		52.75
5	152	15.82	158.0		55.30
6	168	3.29	29.7		56.78
7	177	2.94	25.2		57.58
8	1,002	10.12	15.3		93.99
9	6,518	64.76	15.1		108.66
10	6,761	36.25	8.1		108.97
11	8,266	17.43	3.2		110.67
12	9,160	12.75	2.1		111.66
13	9,729	14.36	2.2		112.28
14	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 8 : JLLR008

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

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

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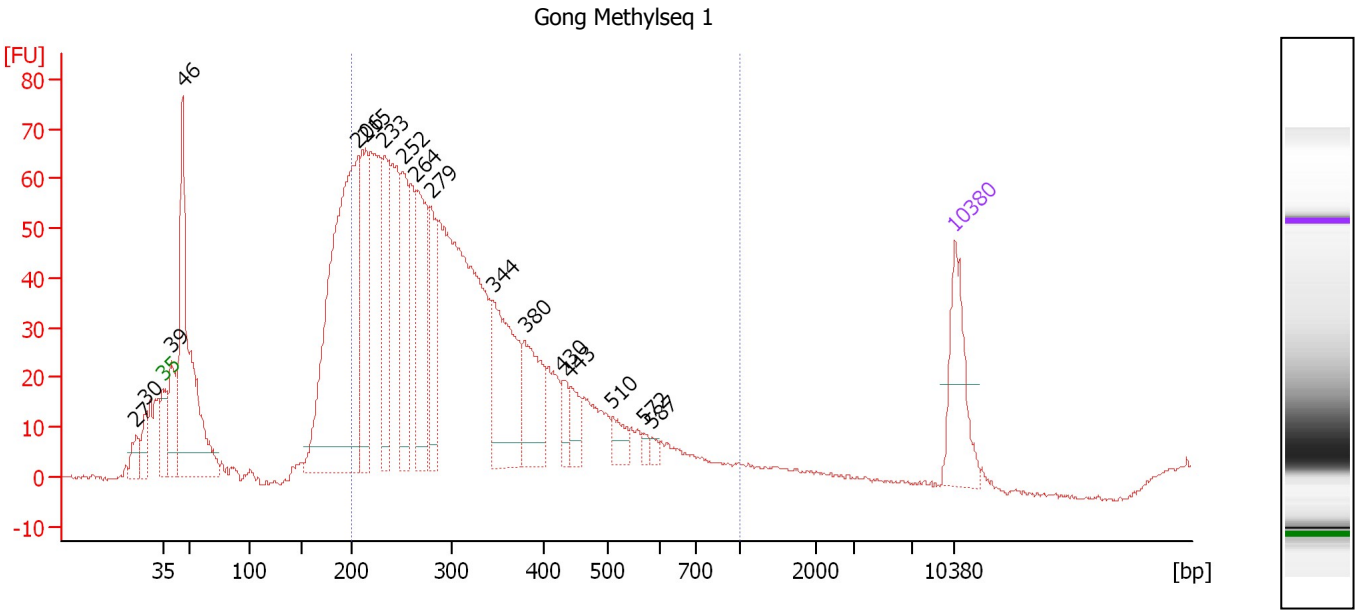


Overall Results for sample 9 : Gong Methylseq 1

Number of peaks found:	17	Corr. Area 1:	1,454.0
Noise:	0.4		

Peak table for sample 9 : Gong Methylseq 1

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	27	0.00	0.0		40.60
2	30	0.00	0.0		41.44
3	35	125.00	5,411.3	Lower Marker	43.00
4	39	103.15	3,966.4		43.66
5	46	427.52	13,983.9		44.70
6	206	615.23	4,518.9		60.21
7	215	178.79	1,261.5		60.96
8	233	139.21	906.2		62.56
9	252	133.33	802.3		64.26
10	264	179.39	1,027.6		65.39
11	279	95.22	517.5		66.66
12	344	178.14	783.5		72.13
13	380	105.86	422.5		74.96
14	430	22.59	79.6		78.31
15	443	29.88	102.3		79.01
16	510	25.45	75.6		82.74
17	572	6.20	16.4		85.57
18	587	6.26	16.2		86.23
19	10,380	75.00	10.9	Upper Marker	113.00

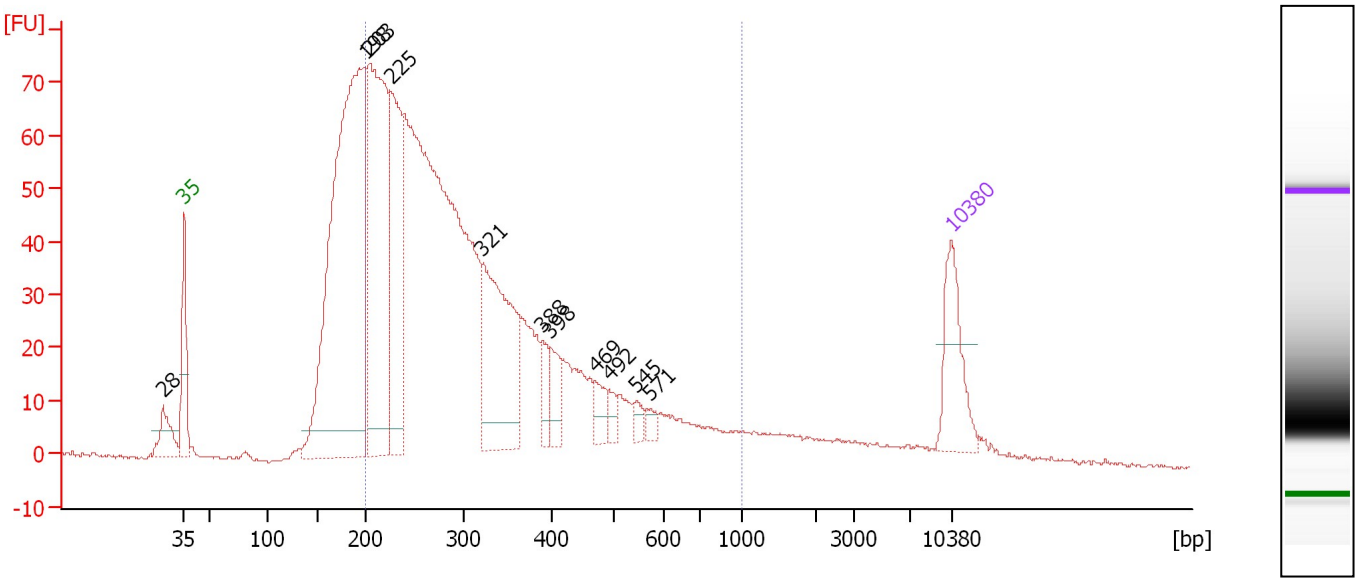
Region table for sample 9 : Gong Methylseq 1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	315	1,000	1,454.0	13,390.4	72	32.9	2,501.09	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 :

Number of peaks found:	11	Corr. Area 1:	1,434.8
Noise:	0.4		

Peak table for sample 10 :

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	28	0.00	0.0		41.10
2	35	125.00	5,411.3	Lower Marker	43.00
3	198	904.80	6,914.3		59.49
4	203	499.11	3,722.1		59.93
5	225	245.50	1,653.1		61.87
6	321	275.49	1,300.4		70.24
7	388	31.50	122.9		75.64
8	398	42.89	163.3		76.42
9	469	26.50	85.6		80.51
10	492	17.03	52.4		81.82
11	545	13.39	37.3		84.30
12	571	11.62	30.8		85.52
13	10,380	75.00	10.9	Upper Marker	113.00

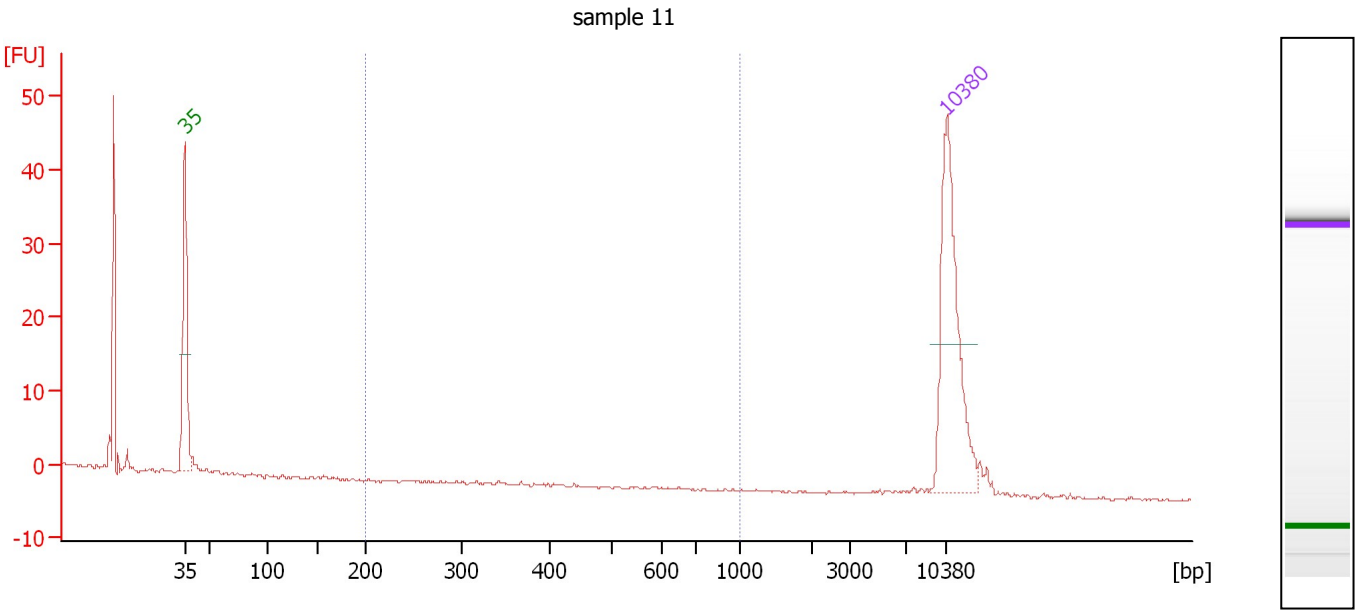
Region table for sample 10 :

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Color
200	329	1,000	1,434.8	14,297.0	71	40.5	2,680.46	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found:	0	Corr. Area 1:	0.0
Noise:	0.2		

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

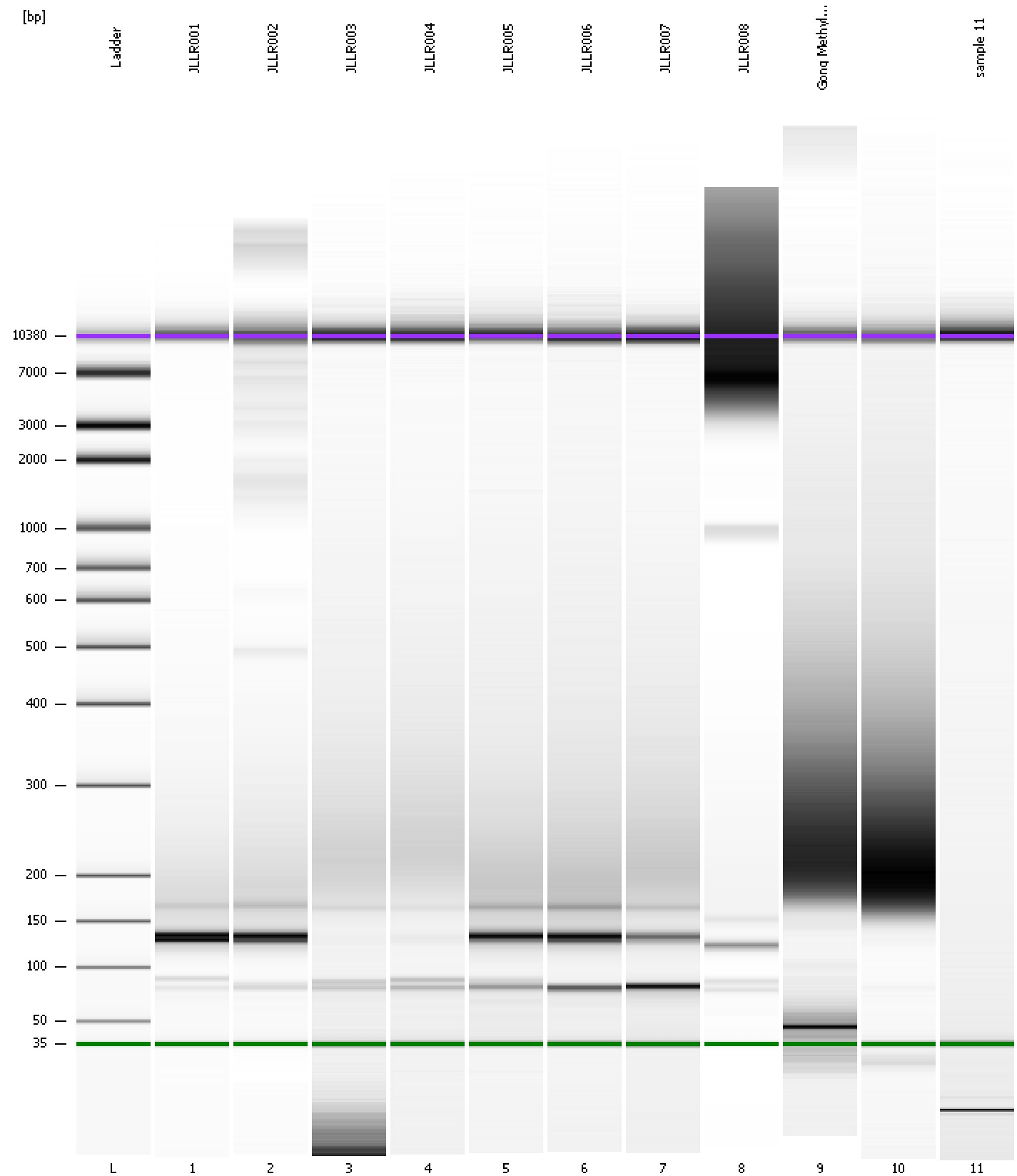
Region table for sample 11 : sample 11

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

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad

Created: 4/22/2015 11:36:07 AM
Modified: 4/22/2015 12:20:06 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		4/22/2015 12:16:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-22\2015-04-22_004.xad)		Instrument	Run		4/22/2015 11:36:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/22/2015 11:36:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/22/2015 11:36:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/22/2015 11:36:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/22/2015 11:36:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/22/2015 11:36:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/22/2015 11:36:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1