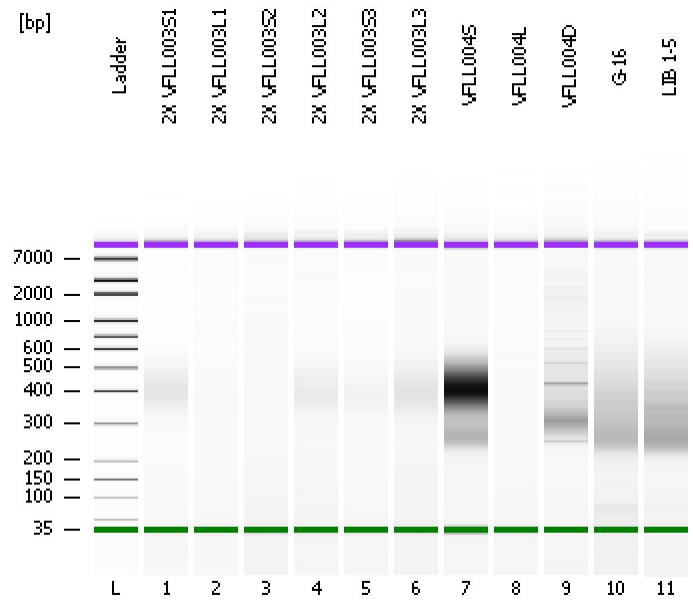
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

Electrophoresis File Run Summary



Instrument Information:

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

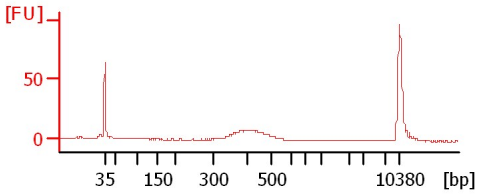
Assay Information:

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

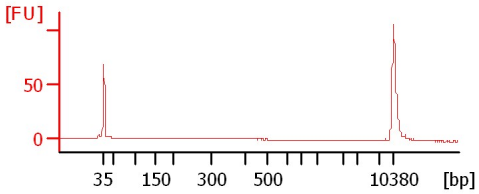
Chip Information:

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

2X VFLL003S1



2X VFLL003L1



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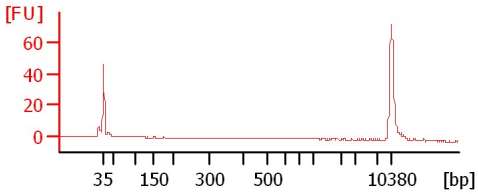

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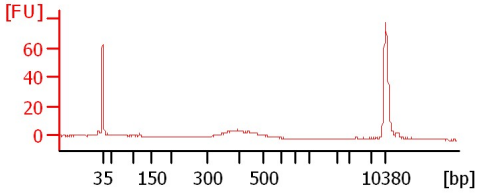
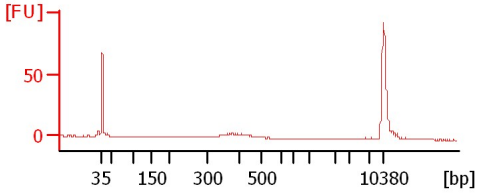
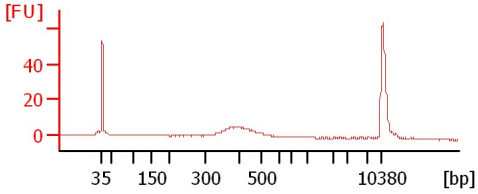


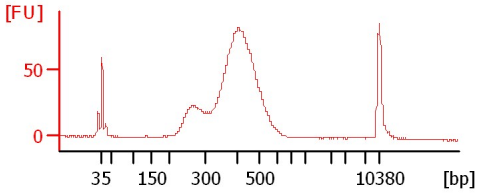
2X VFLL003S3



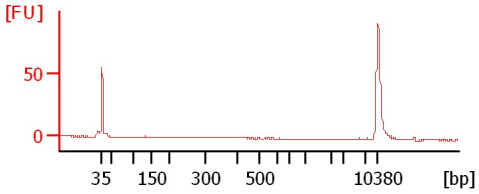
2X VFLL003L3



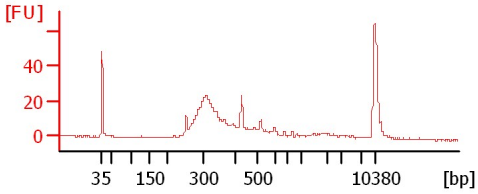
VFLL004S



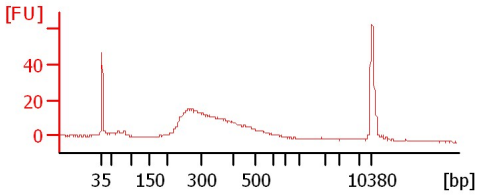
VFLL004L



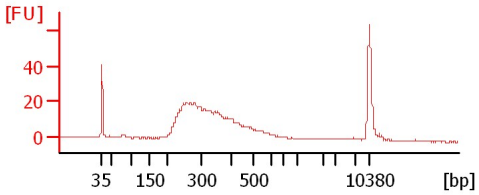
VFLL004D



G-16



LIB 1-5



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
2X VFLL003S1		☐	✔			
2X VFLL003L1		☐	✔			
2X VFLL003S2		☐	✔			
2X VFLL003L2		☐	✔			
2X VFLL003S3		☐	✔			
2X VFLL003L3		☐	✔			
VFLL004S		☐	✔			
VFLL004L		☐	✔			
VFLL004D		☐	✔			
G-16		☐	✔			
LIB 1-5		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 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

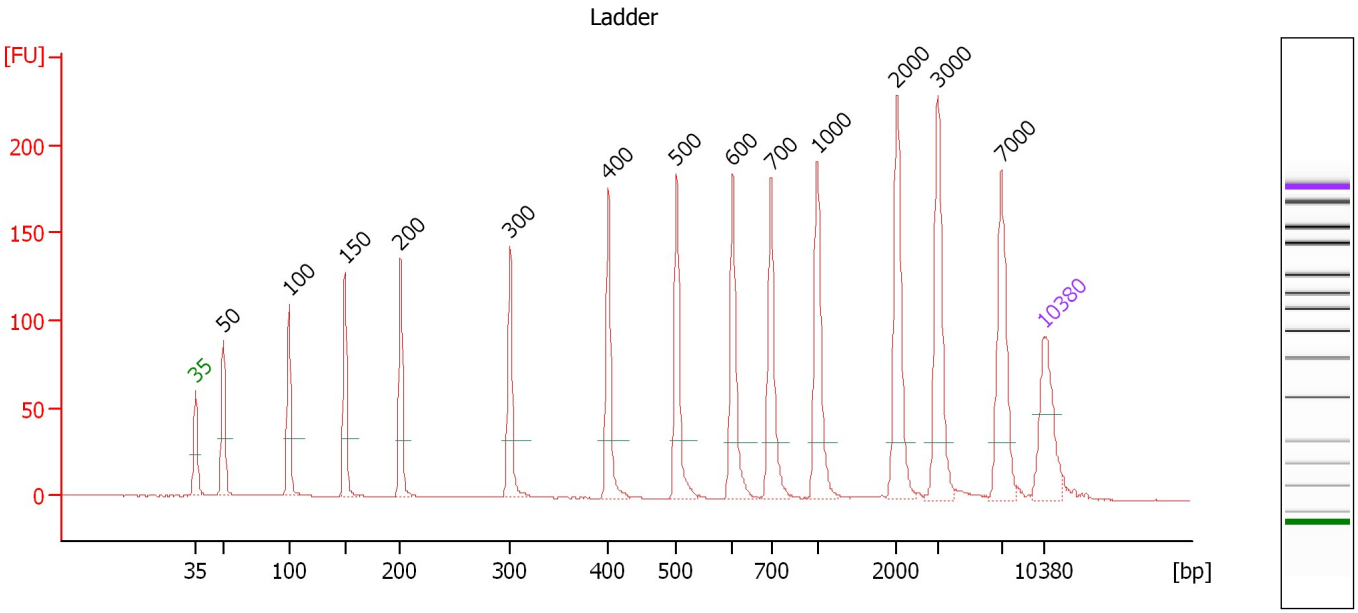
Ladder

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\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

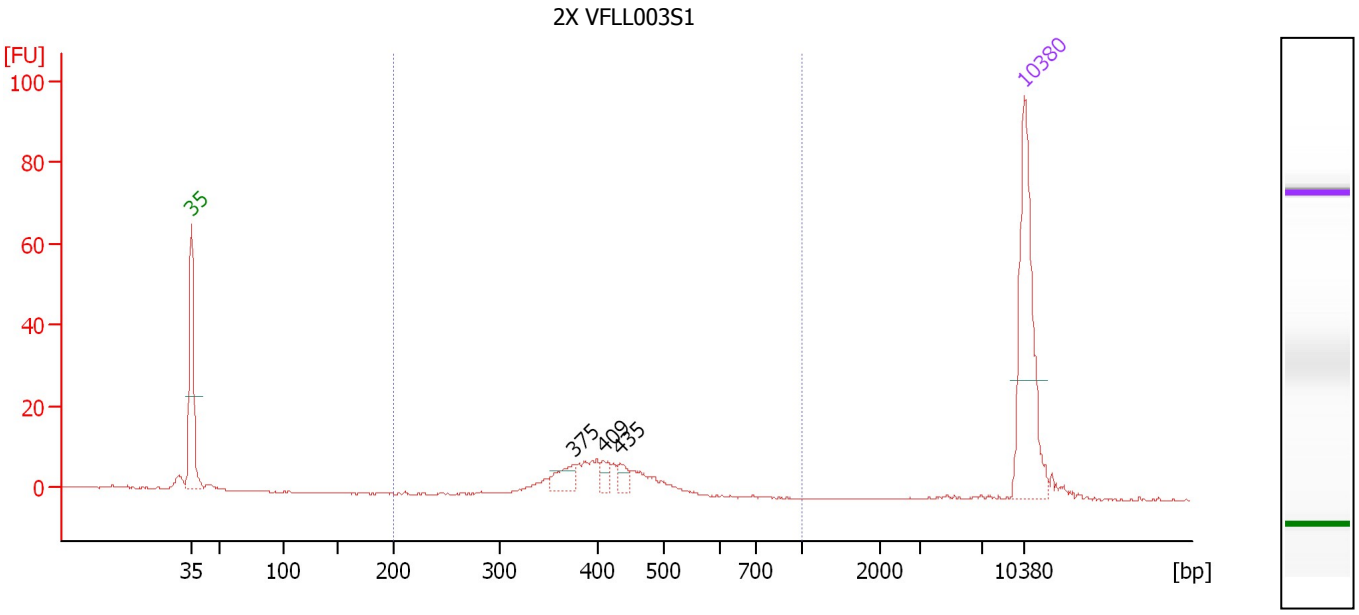
Peak table for Ladder

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1		35	125.00	5,411.3	Lower Marker
2		50	150.00	4,545.5	Ladder Peak
3		100	150.00	2,272.7	Ladder Peak
4		150	150.00	1,515.2	Ladder Peak
5		200	150.00	1,136.4	Ladder Peak
6		300	150.00	757.6	Ladder Peak
7		400	150.00	568.2	Ladder Peak
8		500	150.00	454.5	Ladder Peak
9		600	150.00	378.8	Ladder Peak
10		700	150.00	324.7	Ladder Peak
11		1,000	150.00	227.3	Ladder Peak
12		2,000	150.00	113.6	Ladder Peak
13		3,000	150.00	75.8	Ladder Peak
14		7,000	150.00	32.5	Ladder Peak
15		10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 2X VFLL003S1

Number of peaks found:	3	Corr. Area 1:	90.6
Noise:	0.1		

Peak table for sample 1 : 2X VFLL003S1

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	375	15.14	61.1	
3	409	7.90	29.3	
4	435	8.22	28.6	
5	10,380	75.00	10.9	Upper Marker

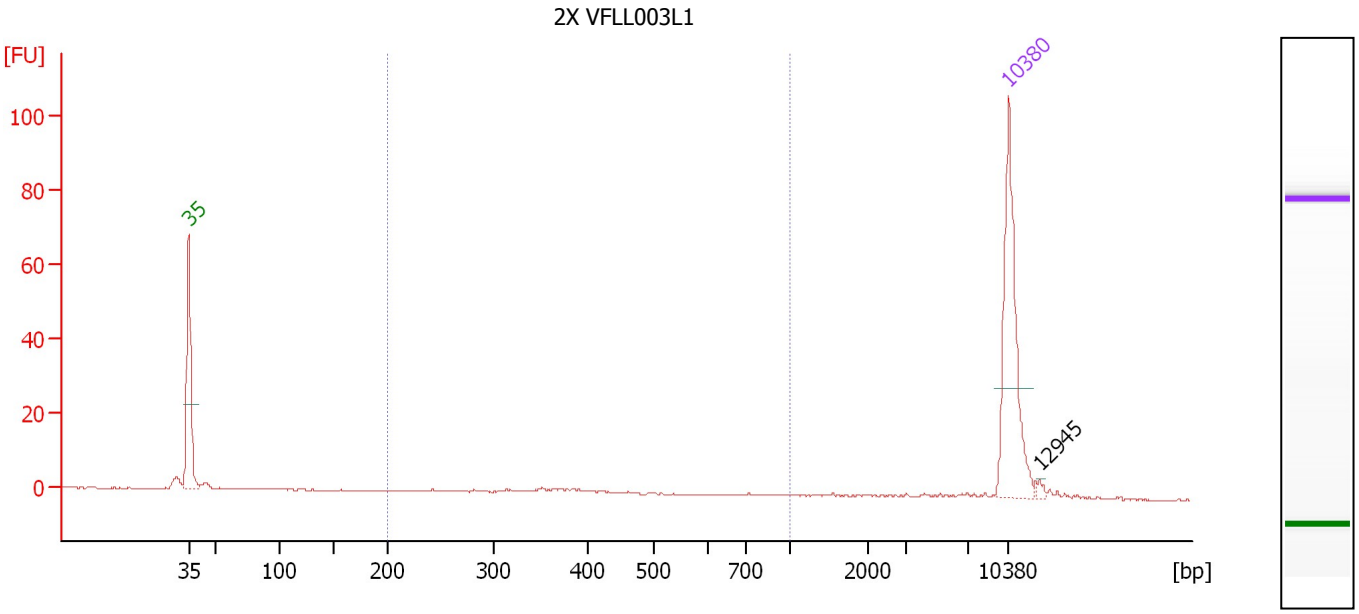
Region table for sample 1 : 2X VFLL003S1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	415	317.3	85.42	90.6	85	12.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2X VFLL003L1

Number of peaks found:	1	Corr. Area 1:	15.4
Noise:	0.2		

Peak table for sample 2 : 2X VFLL003L1

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,945	0.00	0.0	

Region table for sample 2 : 2X VFLL003L1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	421	62.6	15.38	15.4	35	36.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

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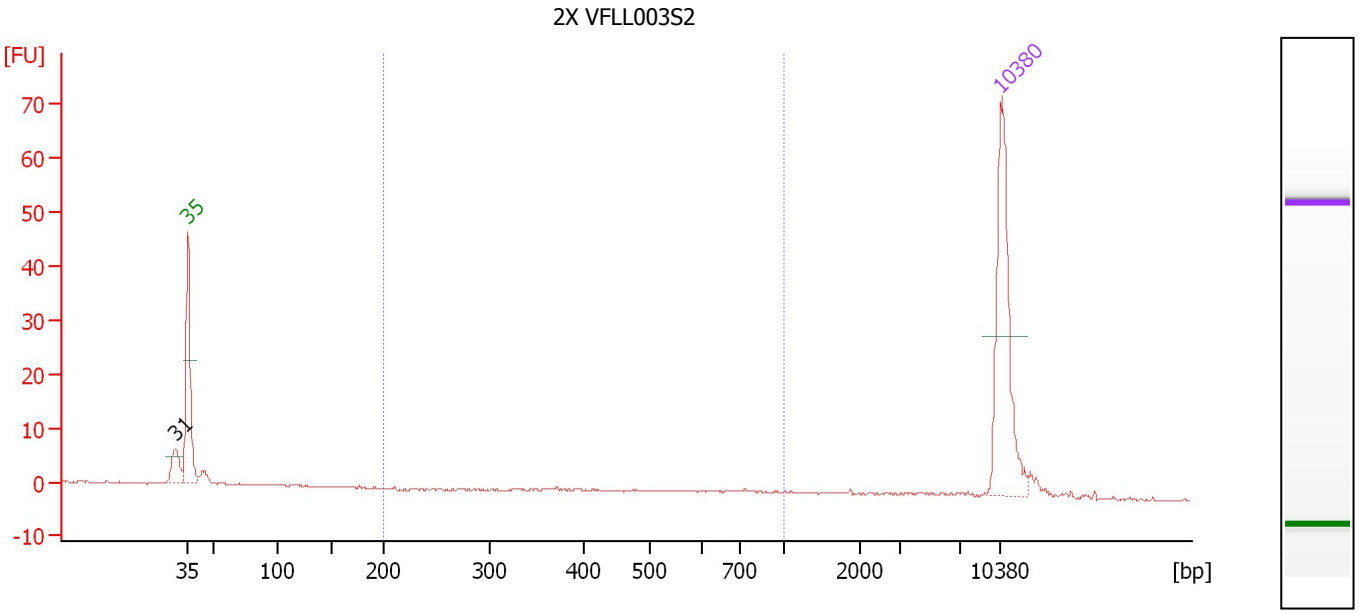

Overall Results for sample 3 : 2X VFLL003S2

Number of peaks found:	1	Corr. Area 1:	2.1
Noise:	0.2		

Peak table for sample 3 : 2X VFLL003S2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	10,380	75.00	10.9	Upper Marker

Region table for sample 3 : 2X VFLL003S2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	643	7.2	2.63	2.1	6	28.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

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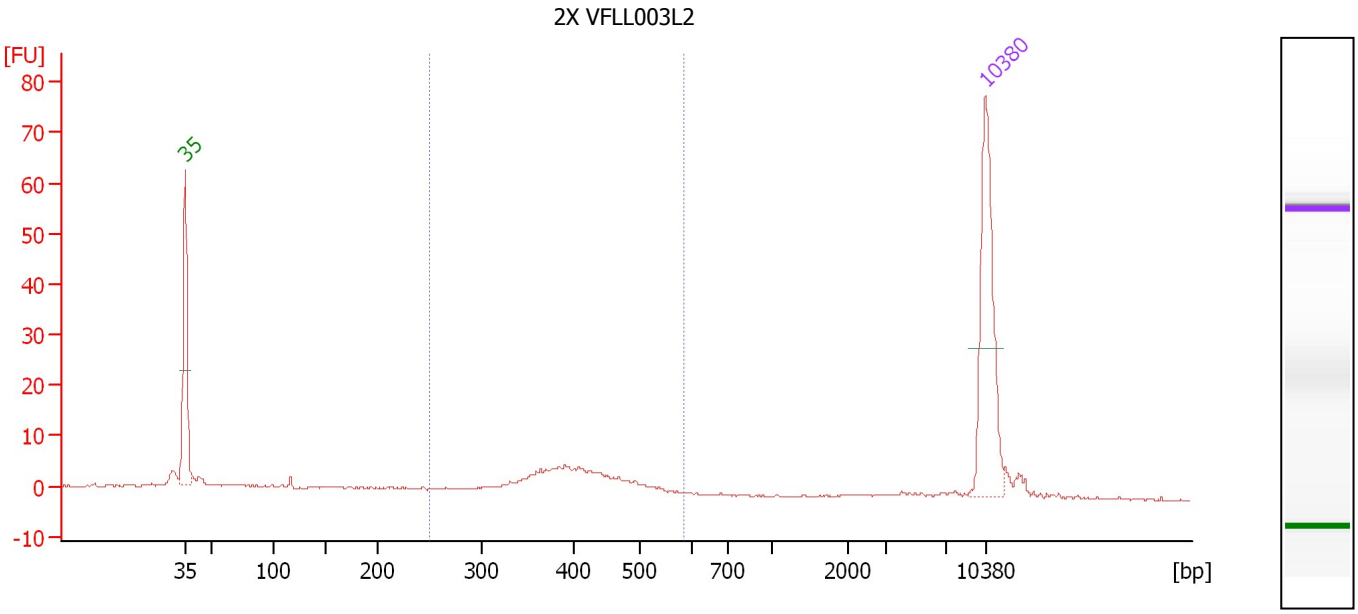

Overall Results for sample 4 : 2X VFLL003L2

Number of peaks found:	0	Corr. Area 1:	68.0
Noise:	0.1		

Peak table for sample 4 : 2X VFLL003L2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

Region table for sample 4 : 2X VFLL003L2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
249	586	404	321.6	82.73	68.0	55	15.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

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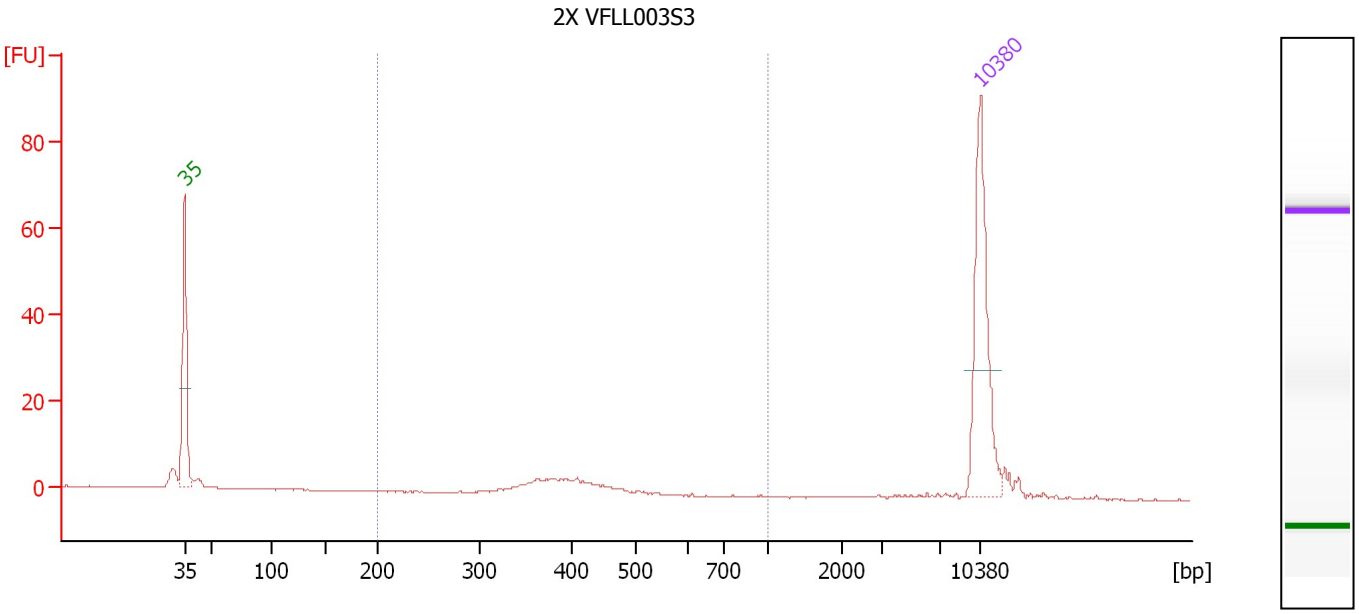

Overall Results for sample 5 : 2X VFLL003S3

Number of peaks found:	0	Corr. Area 1:	32.0
Noise:	0.1		

Peak table for sample 5 : 2X VFLL003S3

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

Region table for sample 5 : 2X VFLL003S3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	398	127.6	33.09	32.0	56	10.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

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Modified: 6/22/2012 4:39:11 PM

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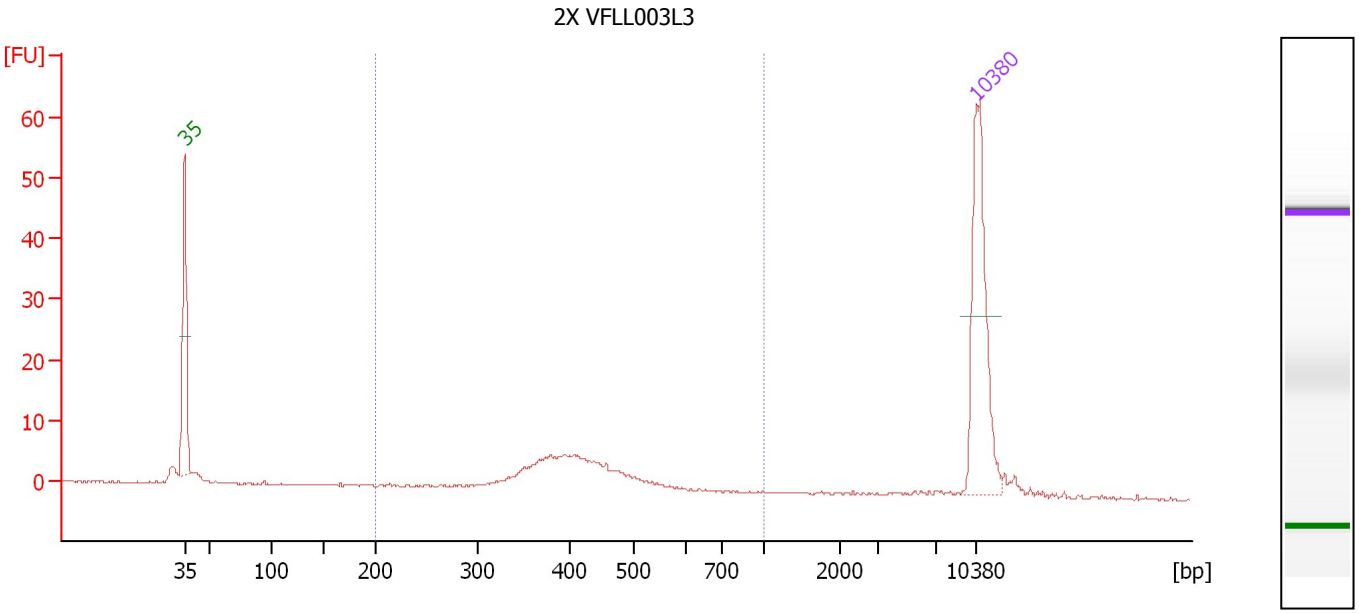

Overall Results for sample 6 : 2X VFLL003L3

Number of peaks found:	0	Corr. Area 1:	78.5
Noise:	0.1		

Peak table for sample 6 : 2X VFLL003L3

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2	▶	10,380	75.00	10.9	Upper Marker

Region table for sample 6 : 2X VFLL003L3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	418	395.7	103.48	78.5	74	21.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

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Modified: 6/22/2012 4:39:11 PM

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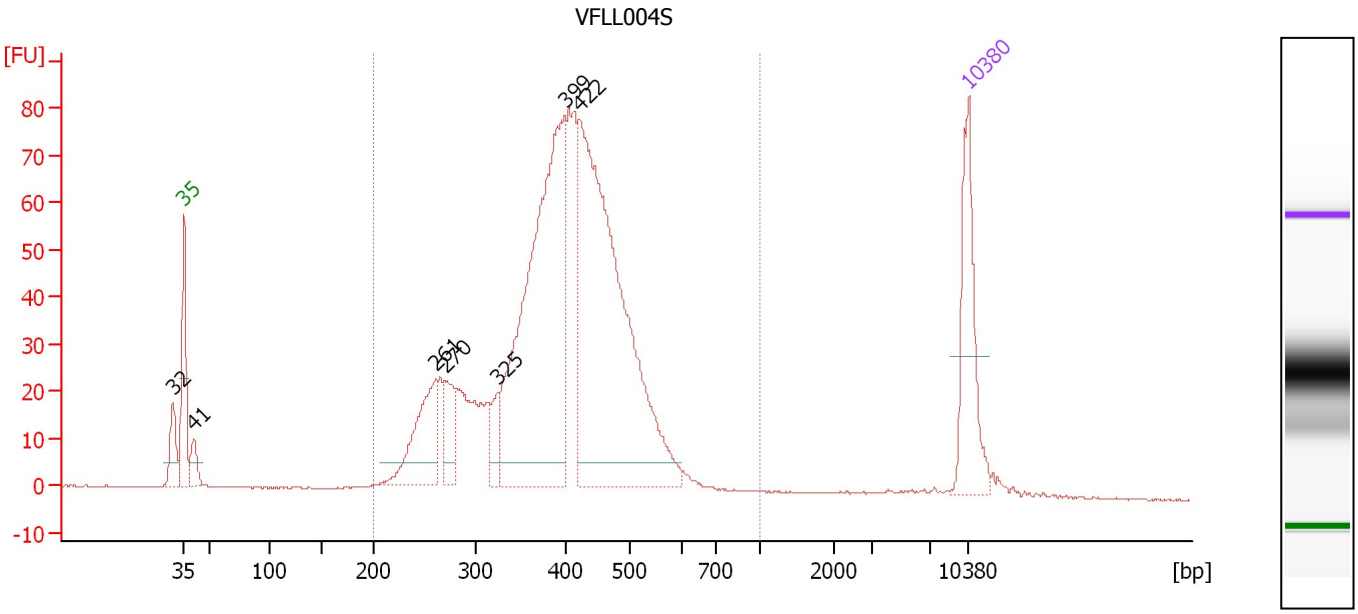


Overall Results for sample 7 : VFLL004S

Number of peaks found:	7	Corr. Area 1:	1,245.6
Noise:	0.2		

Peak table for sample 7 : VFLL004S

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	41	25.85	964.5	
4	261	100.58	583.7	
5	270	45.88	257.4	
6	325	24.33	113.6	
7	399	423.76	1,608.8	
8	422	485.41	1,741.5	
9	10,380	75.00	10.9	Upper Marker

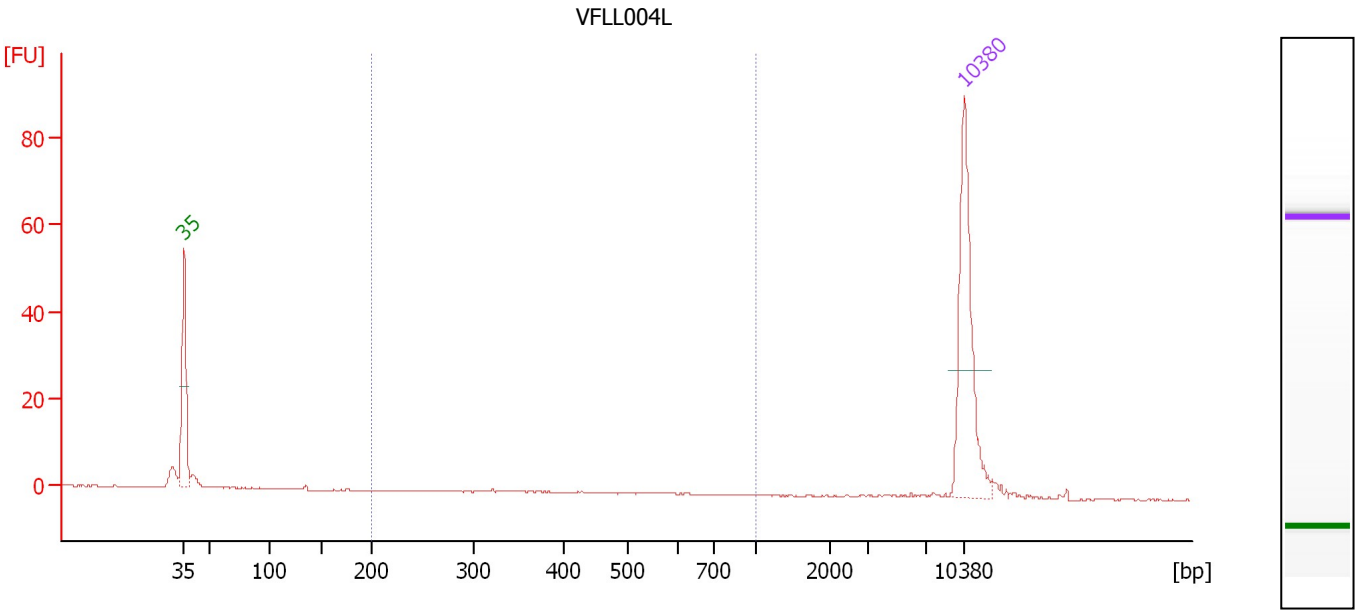
Region table for sample 7 : VFLL004S

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	401	5,691.9	1,402.09	1,245.6	94	21.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : VFLL004L

Number of peaks found:	0	Corr. Area 1:	0.9
Noise:	0.1		

Peak table for sample 8 : VFLL004L

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

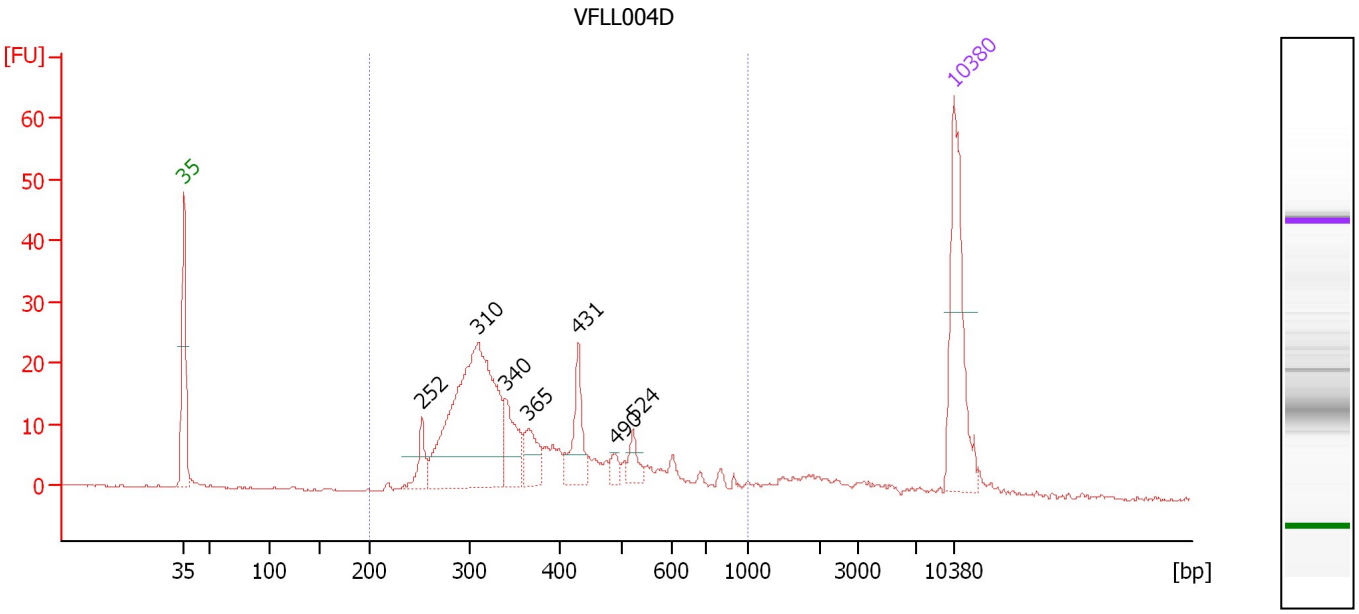
Region table for sample 8 : VFLL004L

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	413	3.9	0.98	0.9	4	26.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : VFLL004D

Number of peaks found:	7	Corr. Area 1:	339.5
Noise:	0.2		

Peak table for sample 9 : VFLL004D

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	252	21.47	129.1	
3	310	240.36	1,176.0	
4	340	41.19	183.4	
5	365	28.32	117.4	
6	431	38.79	136.4	
7	490	7.92	24.5	
8	524	13.09	37.8	
9	10,380	75.00	10.9	Upper Marker

Region table for sample 9 : VFLL004D

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	387	2,241.0	513.96	339.5	88	32.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

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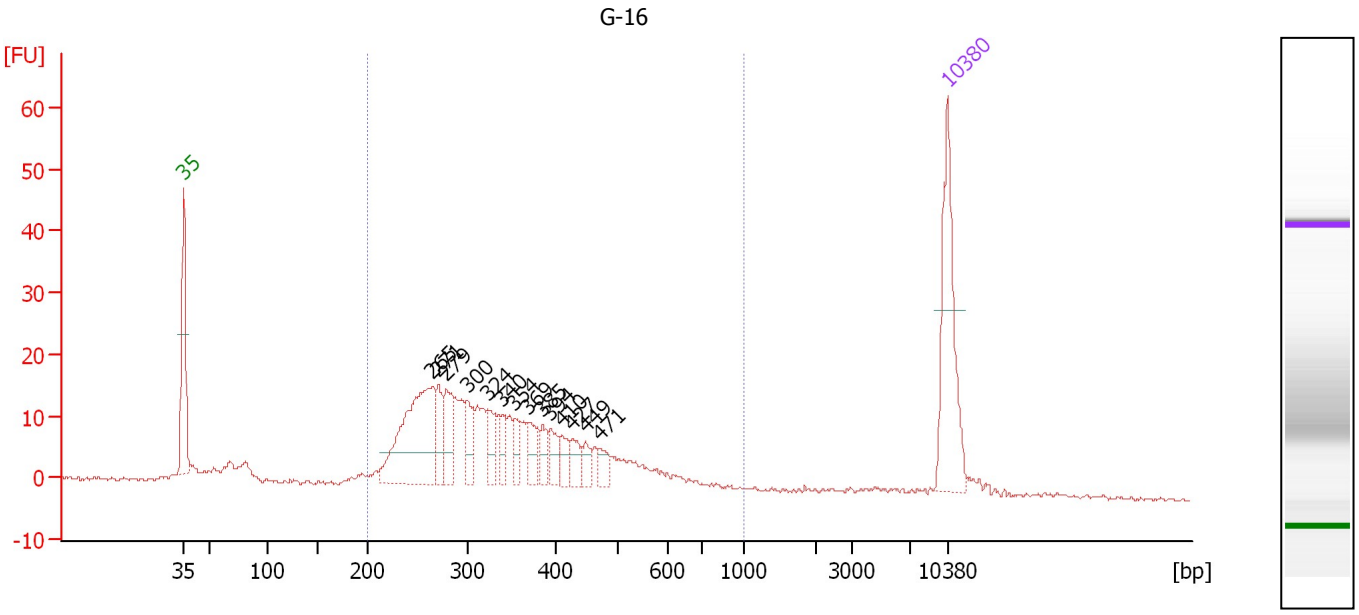
Modified: 6/22/2012 4:39:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : G-16

Number of peaks found:	14	Corr. Area 1:	353.2
Noise:	0.3		

Peak table for sample 10 : G-16

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		265	148.46	848.4	
3		271	28.85	161.3	
4		279	38.64	209.8	
5		300	27.50	138.8	
6		324	23.70	110.9	
7		340	17.89	79.7	
8		354	16.34	70.0	
9		369	21.76	89.4	
10		385	13.24	52.1	
11		394	16.42	63.1	
12		410	12.97	47.9	
13		427	14.46	51.3	
14		449	10.56	35.6	
15		471	11.70	37.6	
16	▶	10,380	75.00	10.9	Upper Marker

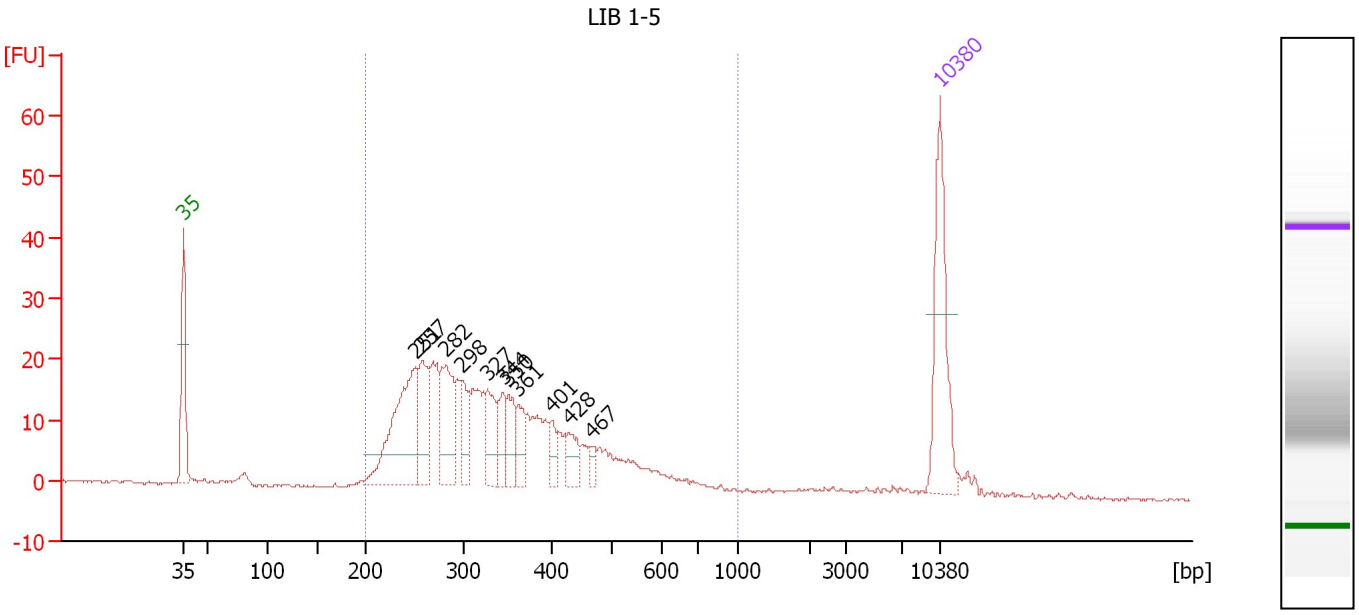
Region table for sample 10 : G-16

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	354	2,859.5	599.22	353.2	88	31.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : LIB 1-5

Number of peaks found:	11	Corr. Area 1:	447.9
Noise:	0.2		

Peak table for sample 11 : LIB 1-5

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		251	139.43	842.5	
3		257	60.96	359.8	
4		282	68.95	370.8	
5		298	33.22	169.2	
6		327	40.13	185.9	
7		344	26.51	116.7	
8		350	27.06	117.1	
9		361	25.02	105.0	
10		401	15.03	56.8	
11		428	22.09	78.2	
12		467	7.98	25.9	
13	▶	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : LIB 1-5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	346	3,730.8	768.70	447.9	94	30.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
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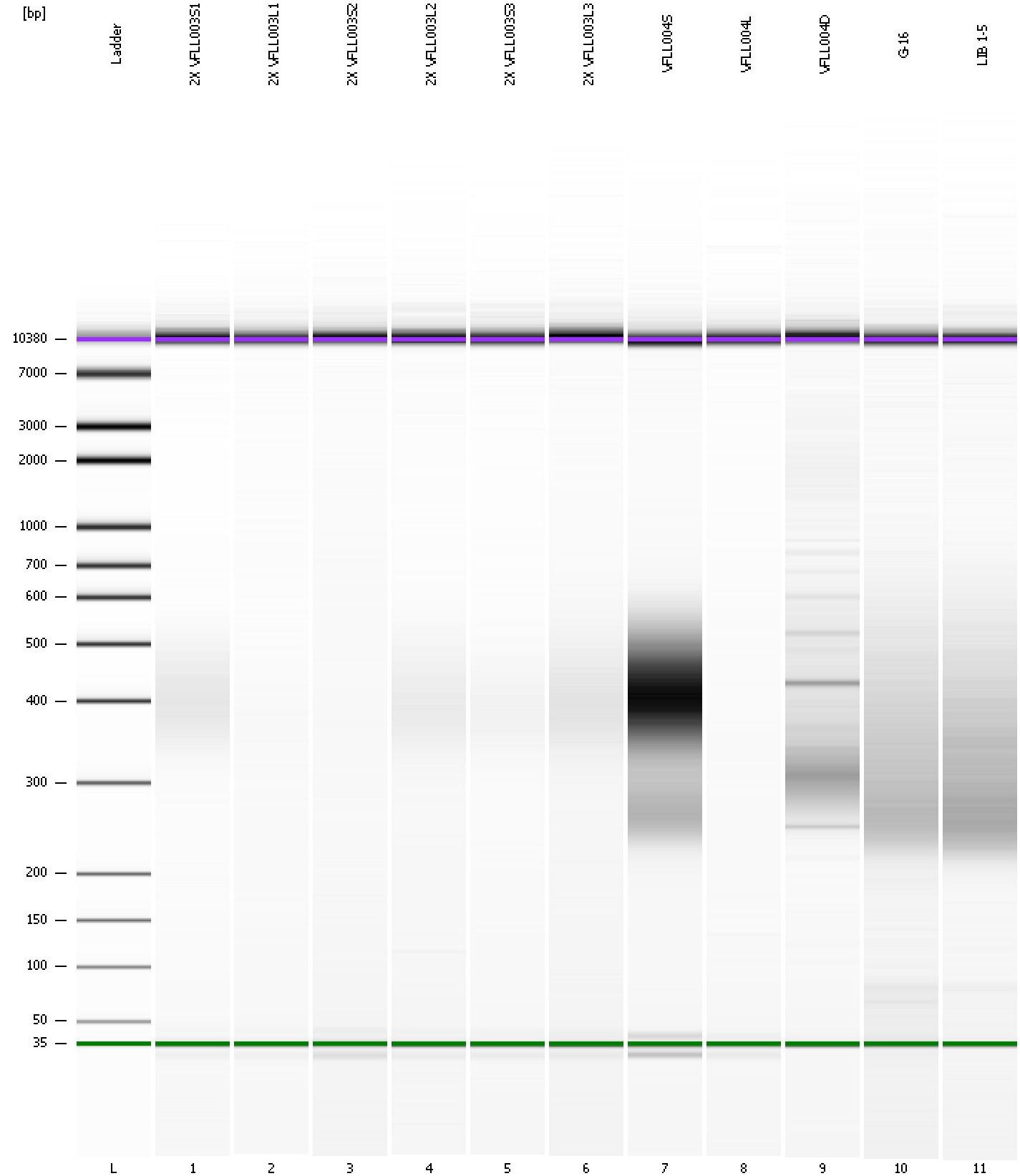
Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad

Created: 6/22/2012 3:57:51 PM
Modified: 6/22/2012 4:39:11 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		6/22/2012 4:39:08 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-22\2012-06-22_003.xad)		Instrument	Run		6/22/2012 3:57:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/22/2012 3:57:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/22/2012 3:57:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/22/2012 3:57:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/22/2012 3:57:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/22/2012 3:57:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/22/2012 3:57:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1