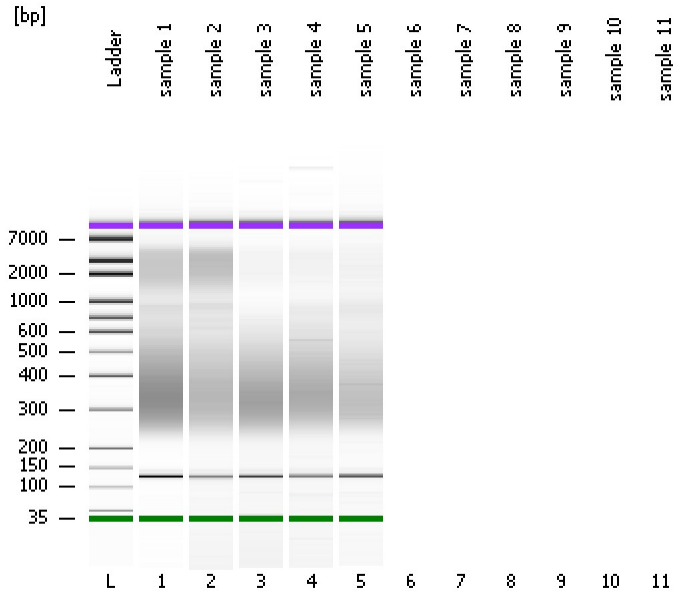
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

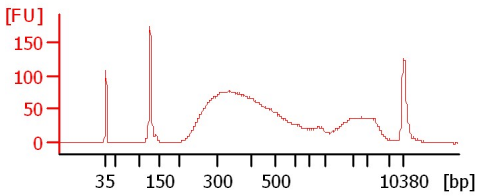
Assay Information:

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

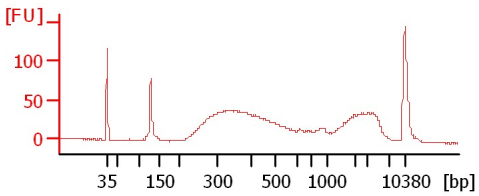
Chip Information:

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

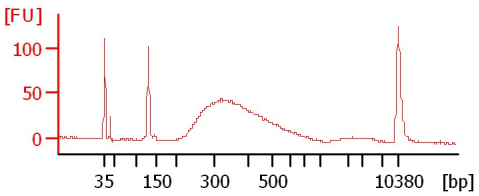
sample 1



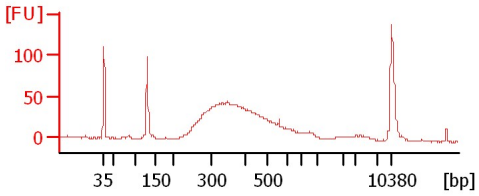
sample 2



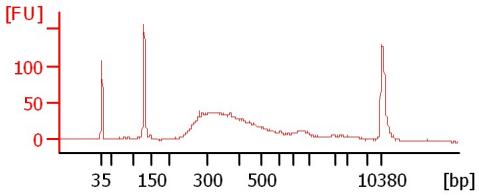
sample 3



sample 4



sample 5



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		☐	✔			
sample 2		☐	✔			
sample 3		☐	✔			
sample 4		☐	✔			
sample 5		☐	✔			
sample 6		☐				
sample 7		☐				
sample 8		☐				
sample 9		☐				
sample 10		☐				
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 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

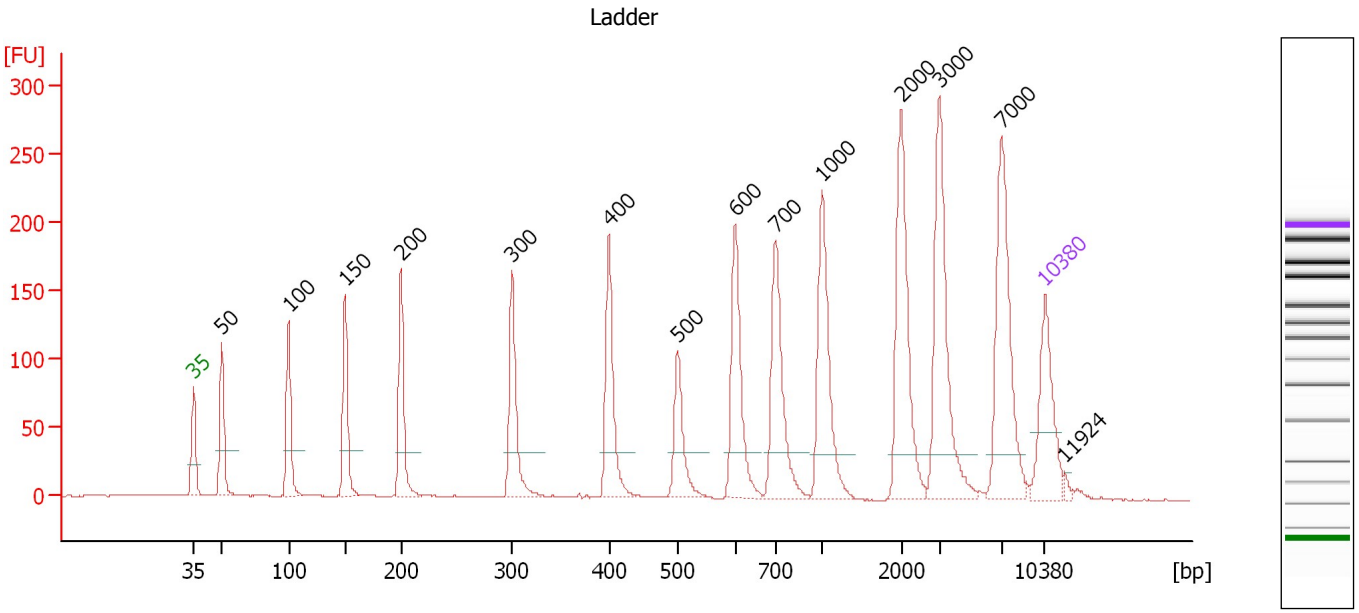
Ladder

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:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

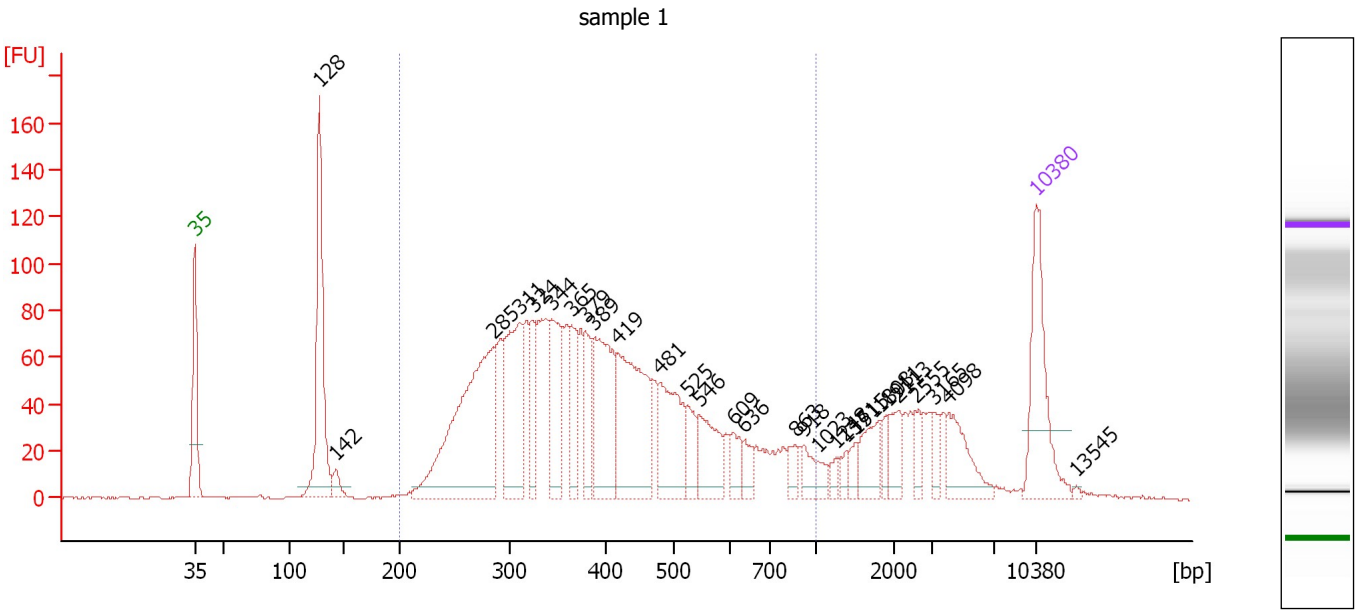
Peak table for Ladder

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	45.32
3		100	150.00	2,272.7	Ladder Peak	50.81
4		150	150.00	1,515.2	Ladder Peak	55.46
5		200	150.00	1,136.4	Ladder Peak	60.06
6		300	150.00	757.6	Ladder Peak	69.18
7		400	150.00	568.2	Ladder Peak	77.17
8		500	150.00	454.5	Ladder Peak	82.82
9		600	150.00	378.8	Ladder Peak	87.56
10		700	150.00	324.7	Ladder Peak	90.85
11		1,000	150.00	227.3	Ladder Peak	94.71
12		2,000	150.00	113.6	Ladder Peak	101.20
13		3,000	150.00	75.8	Ladder Peak	104.32
14		7,000	150.00	32.5	Ladder Peak	109.45
15		10,380	75.00	10.9	Upper Marker	113.00
16		11,924	0.00	0.0		114.62

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found:	28	Corr. Area 1:	2,114.3
Noise:	0.3		

Peak table for sample 1 : sample 1

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	128	198.62	2,357.0		53.38
3	142	15.04	159.9		54.76
4	285	275.54	1,463.4		67.84
5	311	135.54	660.4		70.06
6	324	50.94	238.0		71.12
7	344	86.30	379.8		72.72
8	365	47.73	198.2		74.36
9	379	47.24	188.7		75.52
10	389	117.10	456.4		76.27
11	419	145.98	528.3		78.22
12	481	86.57	272.9		81.73
13	525	27.05	78.1		83.99
14	546	53.36	148.1		85.01
15	609	21.41	53.3		87.85
16	636	14.16	33.7		88.74
17	863	13.67	24.0		92.95
18	918	15.83	26.1		93.66
19	1,023	8.17	12.1		94.86
20	1,248	7.54	9.1		96.32
21	1,371	8.11	9.0		97.12
22	1,515	9.33	9.3		98.05
23	1,808	29.66	24.9		99.96
24	1,911	10.35	8.2		100.62
25	2,113	22.10	15.8		101.56

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,555	12.34	7.3		102.93
27	3,165	10.34	4.9		104.53
28	4,098	38.37	14.2		105.72
29	10,380	75.00	10.9	Upper Marker	113.00
30	13,545	0.00	0.0		116.33

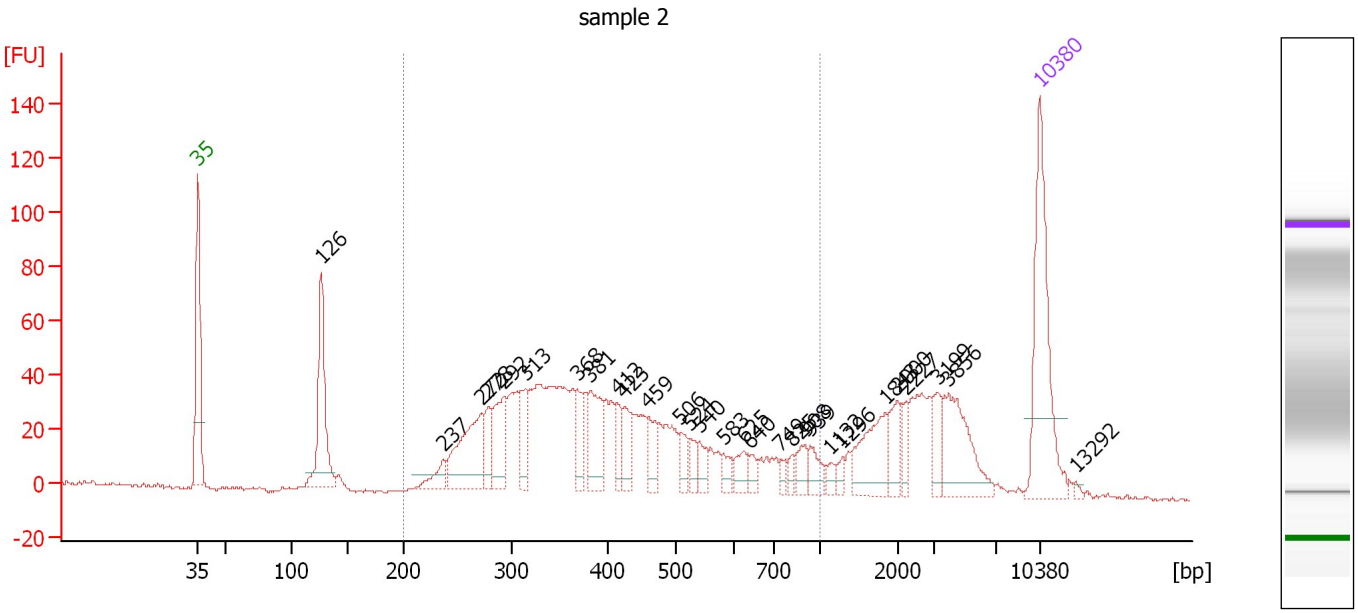
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]
200	1,000	414	1,495.31	2,114.3	6,280.8	76	35.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found:	29	Corr. Area 1:	1,092.9
Noise:	0.5		

Peak table for sample 2 : sample 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	126	91.91	1,103.1		53.25
3	237	15.15	97.0		63.41
4	272	71.09	396.5		66.60
5	278	20.89	113.8		67.18
6	292	44.00	228.6		68.42
7	313	28.87	139.7		70.24
8	368	20.77	85.6		74.58
9	381	41.65	165.6		75.65
10	412	15.55	57.1		77.87
11	423	21.24	76.0		78.49
12	459	18.95	62.6		80.48
13	506	13.24	39.7		83.10
14	524	10.44	30.2		83.94
15	540	10.24	28.8		84.70
16	583	8.35	21.7		86.74
17	625	11.29	27.4		88.38
18	640	6.97	16.5		88.87
19	749	4.78	9.7		91.49
20	825	5.35	9.8		92.46
21	908	10.83	18.1		93.53
22	939	10.85	17.5		93.93
23	1,132	4.77	6.4		95.57
24	1,296	4.84	5.7		96.63
25	1,843	35.72	29.4		100.18

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,000	16.67	12.6		101.20
27	2,227	9.39	6.4		101.91
28	3,199	13.90	6.6		104.57
29	3,856	44.72	17.6		105.41
30	10,380	75.00	10.9	Upper Marker	113.00
31	13,292	0.00	0.0		116.06

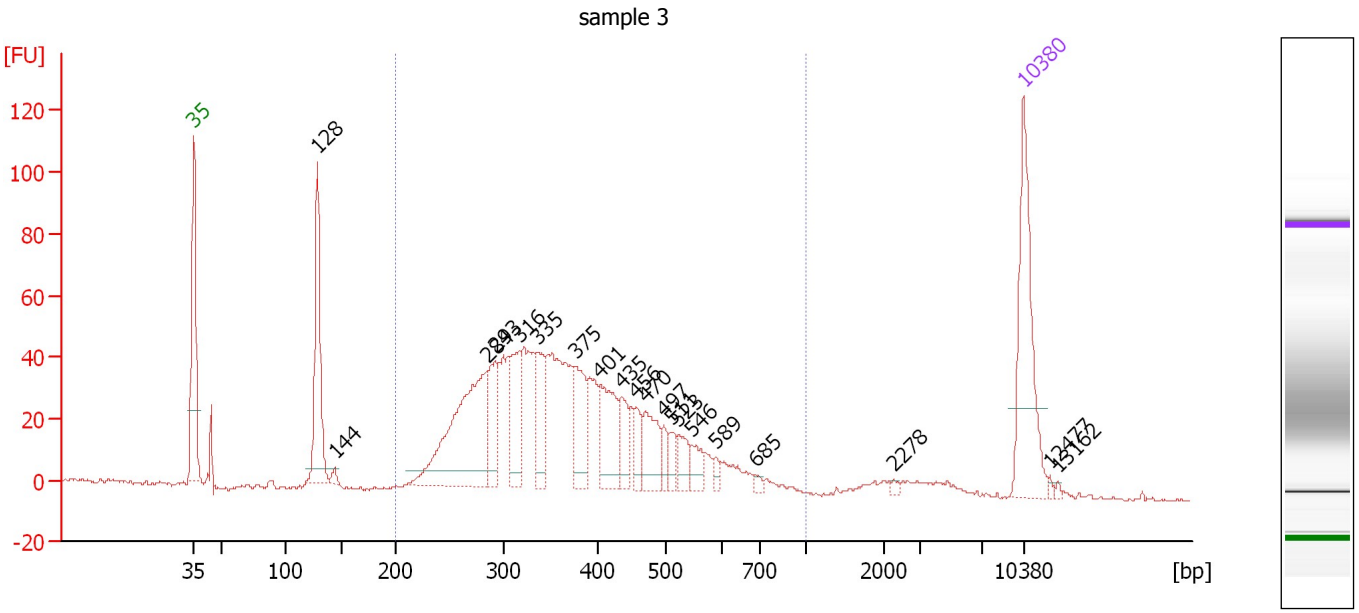
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]
200	1,000	428	719.63	1,092.9	2,974.6	68	37.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found:	20	Corr. Area 1:	1,077.3
Noise:	0.6		

Peak table for sample 3 : sample 3

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	128	114.79	1,355.7		53.44
3	144	4.88	51.3		54.92
4	284	163.43	871.3		67.74
5	293	41.34	214.1		68.51
6	316	47.88	229.3		70.49
7	335	41.22	186.2		72.02
8	375	45.37	183.4		75.17
9	401	54.19	204.6		77.24
10	435	22.71	79.2		79.12
11	456	17.79	59.1		80.34
12	470	34.68	111.7		81.15
13	497	11.65	35.6		82.63
14	511	11.52	34.2		83.35
15	523	15.72	45.6		83.89
16	546	14.06	39.0		85.02
17	589	5.02	12.9		87.04
18	685	3.55	7.8		90.37
19	2,278	2.13	1.4		102.07
20	10,380	75.00	10.9	Upper Marker	113.00
21	12,477	0.00	0.0		115.20
22	13,162	0.00	0.0		115.92

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...

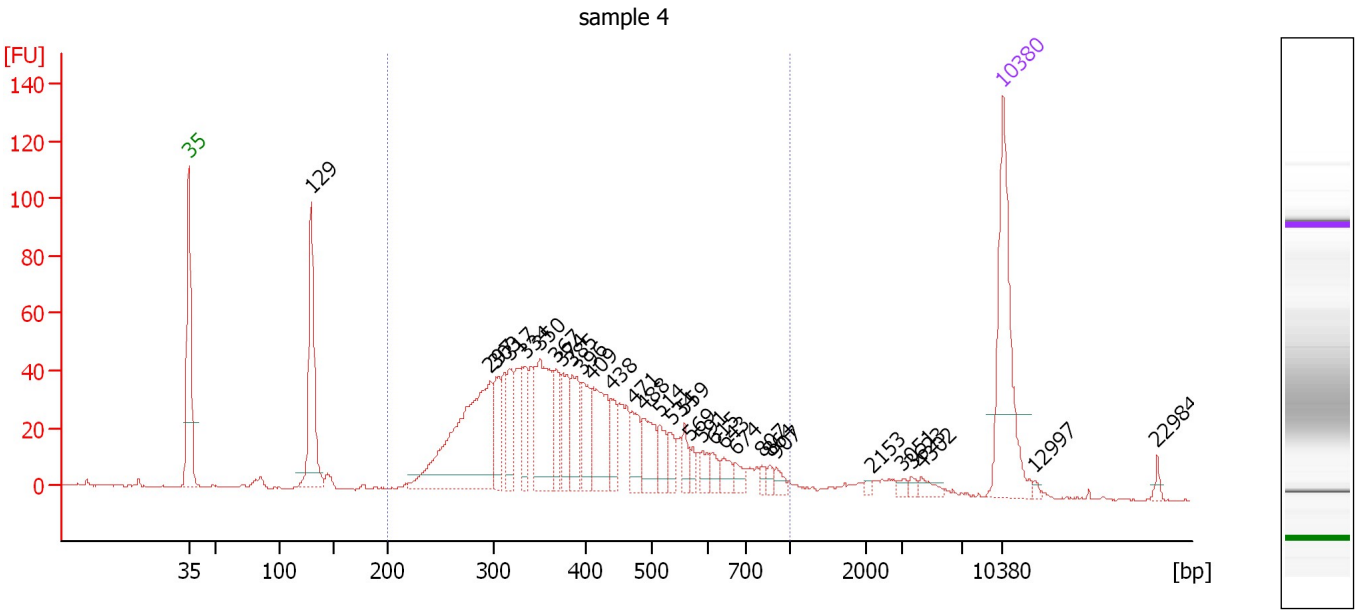
... Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	382	854.54	1,077.3	3,732.3	86	28.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found:	31	Corr. Area 1:	1,105.8
Noise:	0.5		

Peak table for sample 4 : sample 4

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	129	107.31	1,256.2		53.54
3	297	165.69	844.1		68.95
4	303	29.21	146.2		69.40
5	317	30.21	144.3		70.55
6	334	27.69	125.7		71.88
7	350	74.33	321.9		73.16
8	367	26.93	111.3		74.49
9	374	29.20	118.3		75.09
10	385	32.86	129.2		76.01
11	396	28.73	110.0		76.83
12	409	52.59	194.6		77.70
13	438	18.38	63.6		79.31
14	471	22.75	73.2		81.19
15	488	29.08	90.3		82.15
16	514	16.09	47.4		83.48
17	534	12.00	34.0		84.44
18	559	11.25	30.5		85.63
19	569	6.94	18.5		86.09
20	591	8.72	22.4		87.15
21	615	8.31	20.5		88.06
22	643	9.31	21.9		88.98
23	674	7.65	17.2		89.99
24	807	4.23	7.9		92.23
25	865	3.79	6.6		92.97

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...

... Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	907	5.59	9.3		93.52
27	2,153	2.05	1.4		101.68
28	3,051	2.77	1.4		104.38
29	3,623	2.40	1.0		105.12
30	4,302	5.08	1.8		105.99
31	10,380	75.00	10.9	Upper Marker	113.00
32	12,997	0.00	0.0		115.75
33	22,984	0.00	0.0		126.25

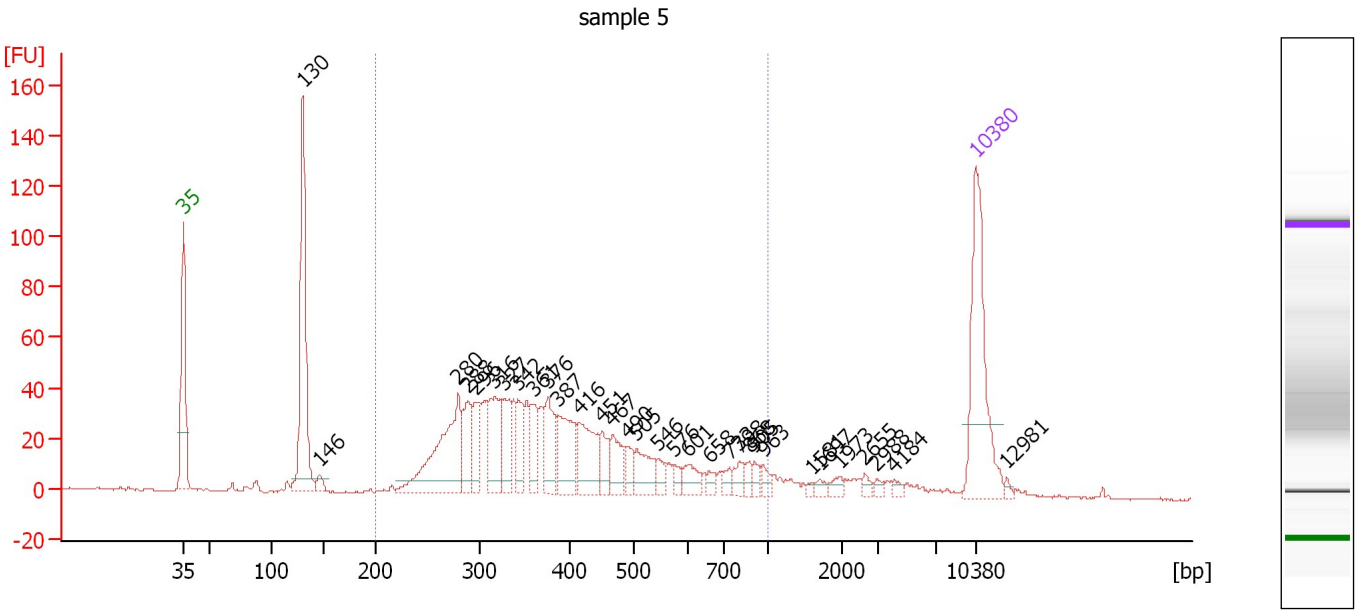
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	411	805.35	1,105.8	3,342.2	85	32.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found:	32	Corr. Area 1:	940.9
Noise:	0.5		

Peak table for sample 5 : sample 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	130	153.79	1,798.1		53.56
3	146	7.25	75.3		55.07
4	280	100.94	547.0		67.32
5	288	32.73	172.0		68.12
6	296	27.38	140.1		68.83
7	316	45.77	219.3		70.48
8	327	31.98	148.0		71.38
9	342	25.16	111.4		72.56
10	361	21.51	90.4		74.02
11	376	33.57	135.3		75.24
12	387	41.85	164.0		76.09
13	416	41.23	150.2		78.07
14	451	17.18	57.7		80.05
15	467	22.65	73.5		80.95
16	490	11.89	36.8		82.27
17	505	22.67	68.0		83.07
18	546	8.49	23.6		85.00
19	576	6.39	16.8		86.41
20	601	12.23	30.8		87.59
21	658	5.60	12.9		89.48
22	733	5.84	12.1		91.27
23	798	7.52	14.3		92.12
24	868	6.55	11.4		93.01
25	905	5.54	9.3		93.48

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	963	5.77	9.1		94.24
27	1,581	1.98	1.9		98.48
28	1,697	3.43	3.1		99.24
29	1,973	4.89	3.8		101.03
30	2,655	3.68	2.1		103.24
31	2,988	2.61	1.3		104.28
32	4,184	3.04	1.1		105.84
33	10,380	75.00	10.9	Upper Marker	113.00
34	12,981	0.00	0.0		115.73

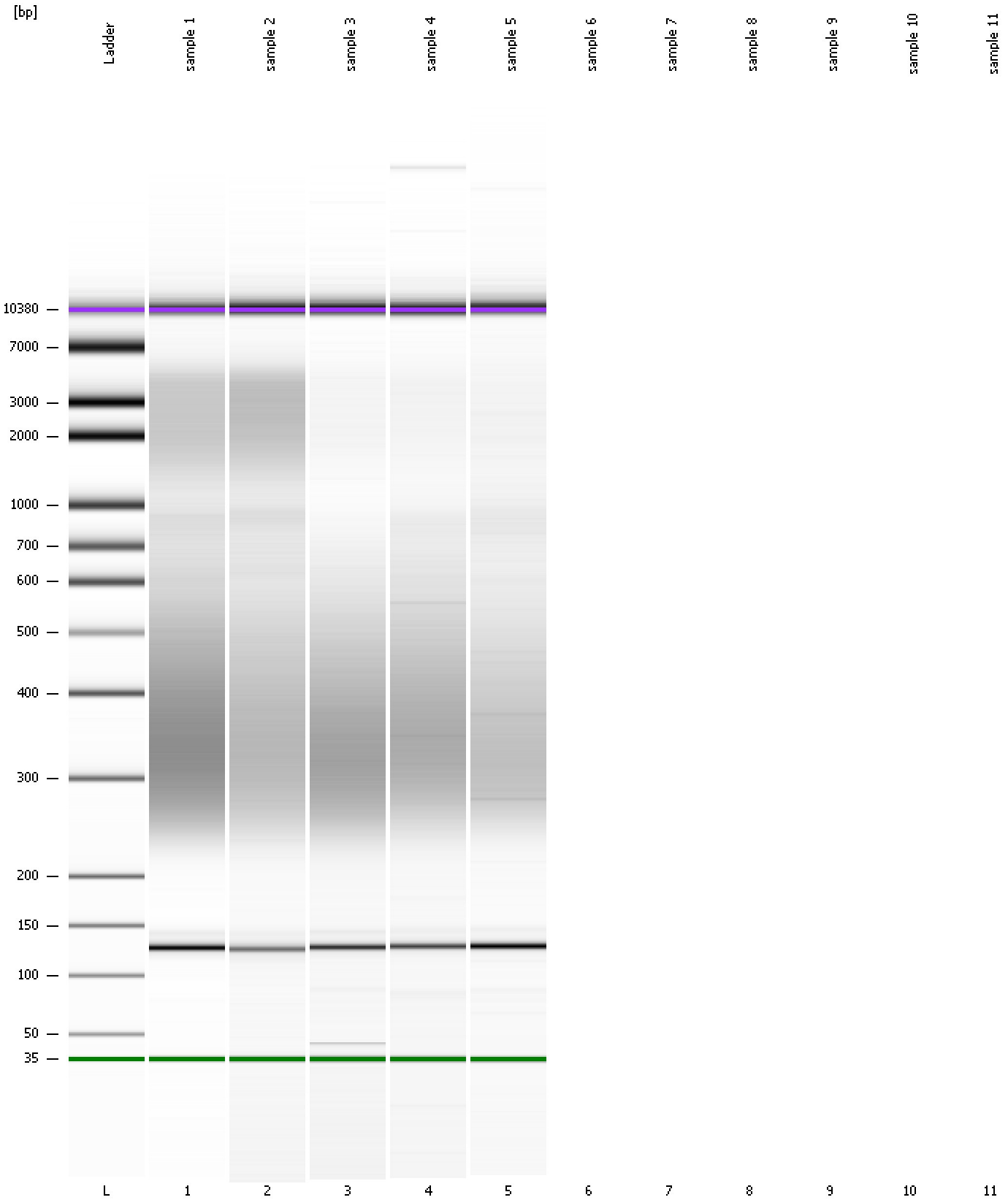
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]
200	1,000	416	638.81	940.9	2,680.0	76	36.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 4/30/2019 12:19:30 PM
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad Modified: 4/30/2019 12:43:34 PM

Invalid Samples

Sample 6 has not been run, no results available.

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-30\2019-04-30_003.xad

Created: 4/30/2019 12:19:30 PM
Modified: 4/30/2019 12:43:34 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 6)		Instrument	Run		4/30/2019 12:43:34 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\2019-04-30\2019-04-30_003.xad)		Instrument	Run		4/30/2019 12:19:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		4/30/2019 12:19:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/30/2019 12:19:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/30/2019 12:19:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		4/30/2019 12:19:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/30/2019 12:19:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/30/2019 12:19:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1