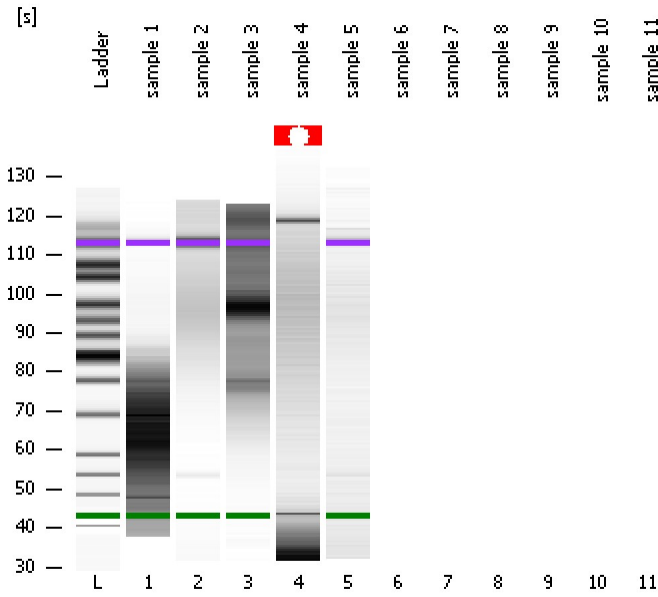


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
Modified: 5/2/2019 12:08:41 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

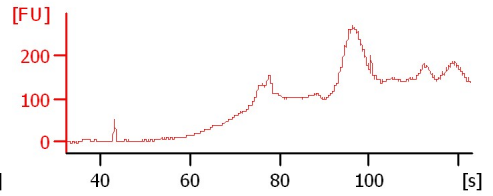
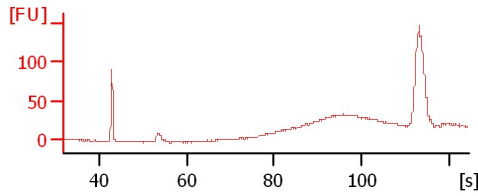
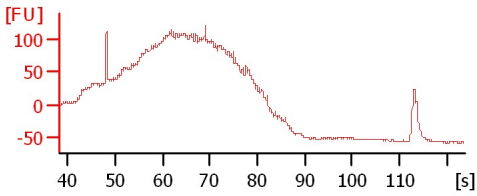
Chip Information:

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

sample 1

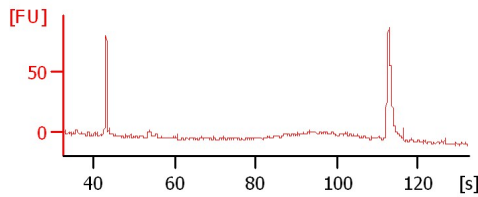
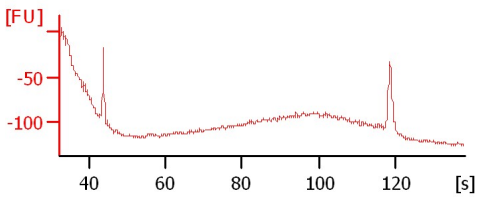
sample 2

sample 3



sample 4

sample 5



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>				
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
Modified: 5/2/2019 12:08:41 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

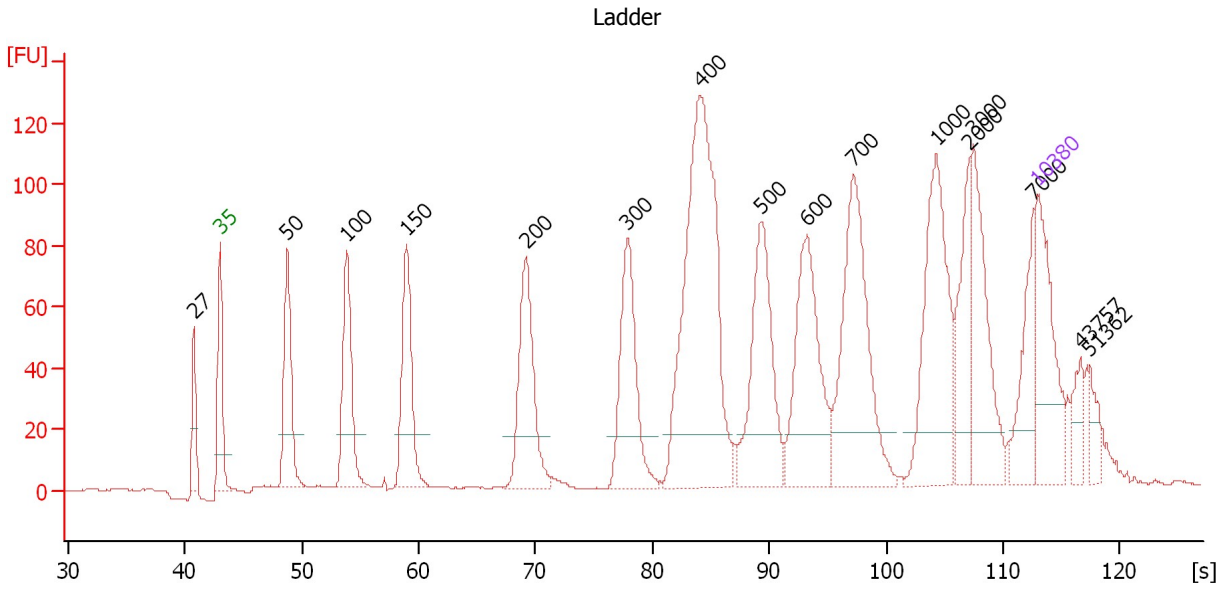
Ladder

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\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

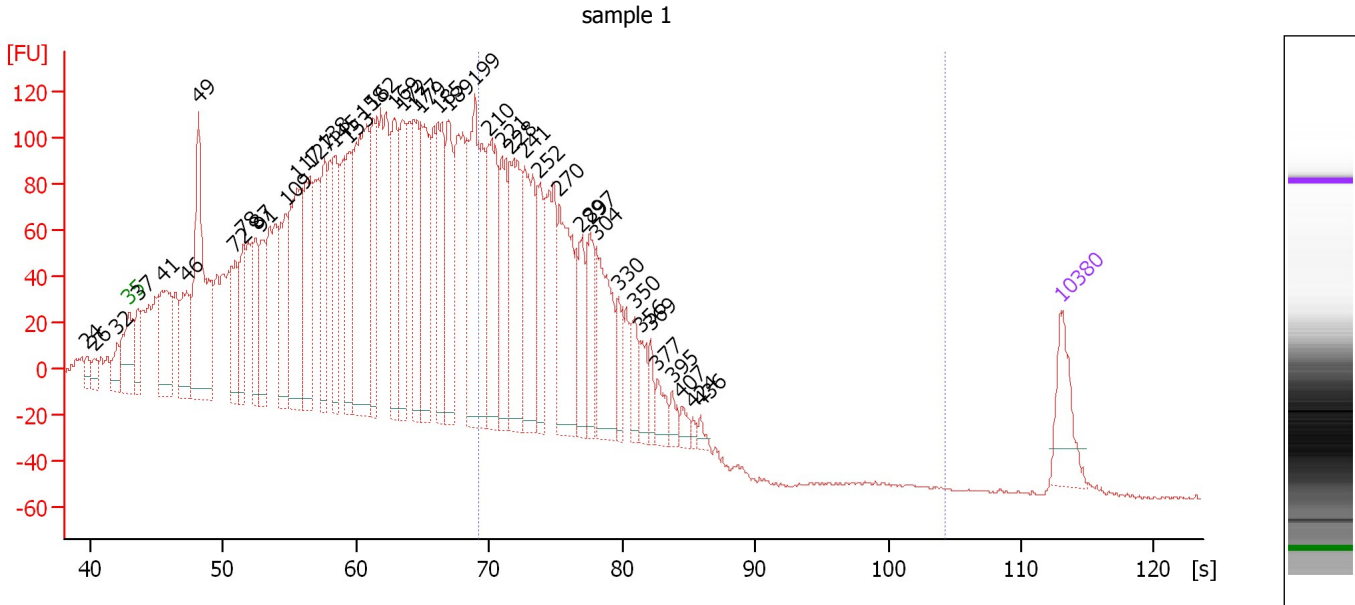
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	27	0.00	0.0		40.75
2	35	125.00	5,411.3	Lower Marker	43.00
3	50	150.00	4,545.5	Ladder Peak	48.75
4	100	150.00	2,272.7	Ladder Peak	53.85
5	150	150.00	1,515.2	Ladder Peak	58.95
6	200	150.00	1,136.4	Ladder Peak	69.20
7	300	150.00	757.6	Ladder Peak	77.89
8	400	150.00	568.2	Ladder Peak	84.09
9	500	150.00	454.5	Ladder Peak	89.24
10	600	150.00	378.8	Ladder Peak	93.24
11	700	150.00	324.7	Ladder Peak	97.19
12	1,000	150.00	227.3	Ladder Peak	104.31
13	2,000	150.00	113.6	Ladder Peak	107.16
14	3,000	150.00	75.8	Ladder Peak	107.48
15	7,000	150.00	32.5	Ladder Peak	112.63
16	10,380	75.00	10.9	Upper Marker	113.00
17	43,757	0.00	0.0		116.63
18	51,362	0.00	0.0		117.46

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 44 Corr. Area 1: 1,837.2
 Noise: 0.5

Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	24	0.00	0.0		39.81
2	26	0.00	0.0		40.34
3	32	0.00	0.0		42.07
4	35	125.00	5,411.3	Lower Marker	43.00
5	37	100.92	4,179.9		43.61
6	41	259.19	9,479.9		45.46
7	46	170.08	5,569.2		47.32
8	49	512.96	15,995.7		48.20
9	72	131.65	2,786.3		50.95
10	78	142.61	2,787.3		51.55
11	87	150.59	2,634.3		52.48
12	91	150.28	2,503.2		52.93
13	109	211.09	2,940.8		54.74
14	117	394.69	5,091.3		55.63
15	127	255.59	3,050.6		56.60
16	138	204.41	2,250.4		57.69
17	145	191.89	2,003.2		58.45
18	153	250.23	2,479.8		59.54
19	158	474.32	4,548.2		60.59
20	162	221.24	2,074.9		61.32
21	169	225.27	2,016.9		62.89
22	172	238.53	2,099.0		63.50
23	177	234.21	2,010.4		64.38
24	179	255.33	2,160.4		64.91
25	185	233.97	1,912.4		66.20

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 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	189	225.69	1,806.3		67.01
27	199	442.66	3,374.5		68.94
28	210	292.91	2,117.5		70.03
29	221	182.62	1,250.9		71.04
30	228	266.72	1,774.7		71.61
31	241	256.74	1,616.0		72.73
32	252	137.56	827.6		73.70
33	270	260.51	1,459.5		75.32
34	289	117.66	617.8		76.89
35	297	106.30	541.6		77.66
36	304	193.84	965.7		78.14
37	330	60.17	276.1		79.76
38	350	56.03	242.8		80.97
39	356	46.54	198.0		81.37
40	369	30.64	126.0		82.14
41	377	39.36	158.2		82.66
42	395	23.07	88.5		83.79
43	407	18.67	69.4		84.48
44	424	9.43	33.7		85.32
45	436	12.24	42.6		85.93
46	▶ 10,380	75.00	10.9	Upper Marker	113.00

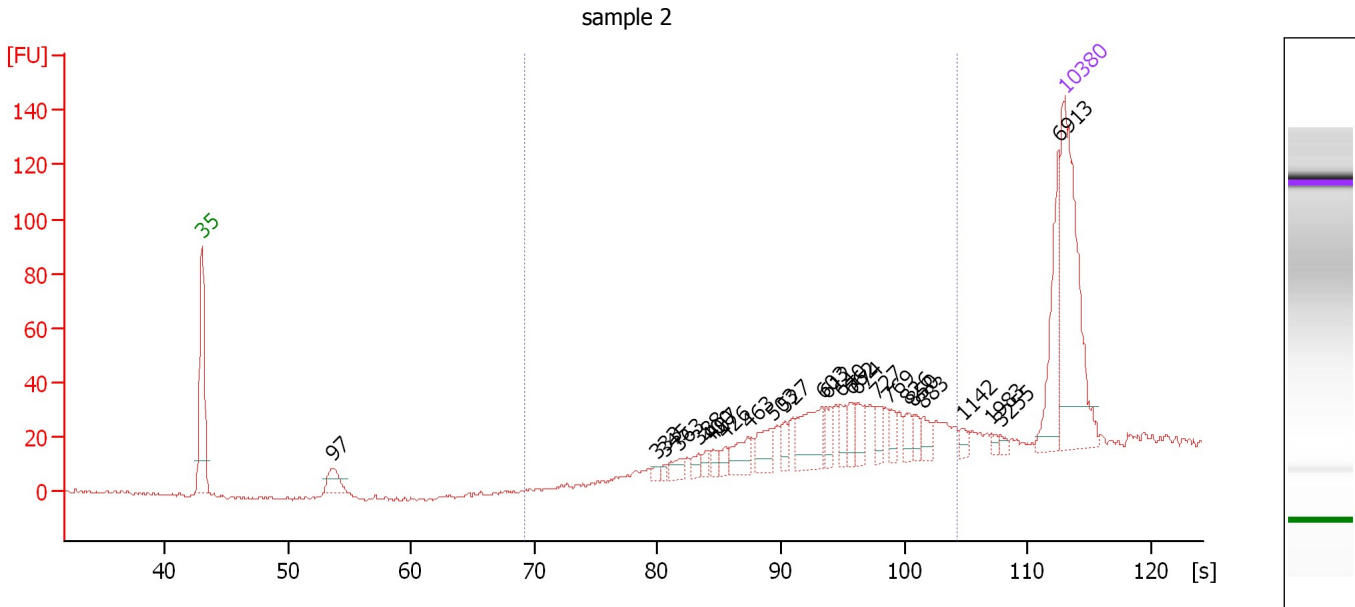
Region table for sample 1 : sample 1

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	270	2,392.58	1,837.2	13,891.6	■ 28	19.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 25 Corr. Area 1: 341.0
 Noise: 0.6

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	97	16.27	252.9		53.59
3	333	2.74	12.4		79.96
4	345	2.46	10.8		80.66
5	363	6.65	27.8		81.79
6	388	5.27	20.6		83.32
7	400	3.90	14.8		84.10
8	407	4.85	18.0		84.45
9	426	4.72	16.8		85.45
10	463	13.43	44.0		87.33
11	503	15.22	45.8		89.38
12	527	7.18	20.6		90.33
13	603	26.32	66.2		93.34
14	612	7.08	17.5		93.69
15	640	7.77	18.4		94.82
16	662	8.44	19.3		95.70
17	674	9.34	21.0		96.18
18	727	7.09	14.8		97.83
19	769	5.85	11.5		98.83
20	826	6.23	11.4		100.19
21	850	5.46	9.7		100.75
22	883	6.75	11.6		101.54
23	1,142	3.40	4.5		104.72
24	1,983	1.81	1.4		107.12
25	3,255	1.96	0.9		107.81

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	6,913	33.02	7.2		112.52
27	10,380	75.00	10.9	Upper Marker	113.00

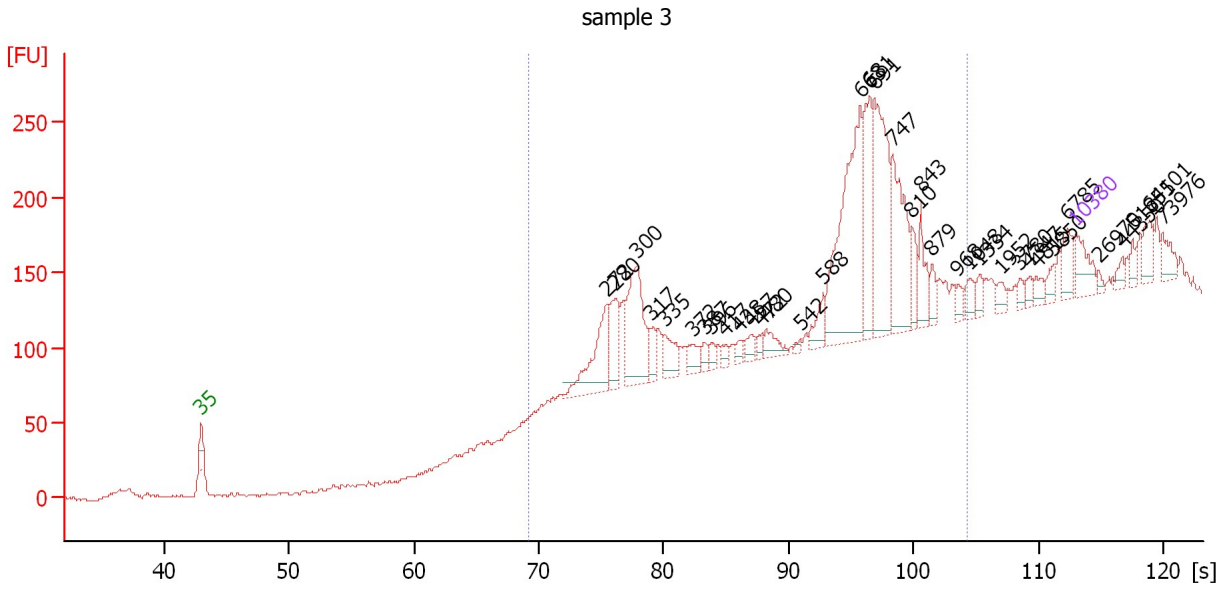
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ μ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	657	176.91	341.0	442.2	 70	24.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 36 Corr. Area 1: 1,910.5
 Noise: 1.3

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	272	297.90	1,657.1		75.49
3	280	175.83	952.1		76.13
4	300	374.73	1,891.8		77.89
5	317	68.81	329.2		78.92
6	335	100.58	454.3		80.08
7	372	56.91	231.7		82.36
8	387	29.89	117.1		83.26
9	396	29.82	114.2		83.82
10	417	22.93	83.4		84.94
11	438	25.96	89.8		86.06
12	457	39.58	131.3		87.00
13	472	24.02	77.0		87.82
14	480	60.81	192.0		88.21
15	542	10.81	30.2		90.91
16	588	70.23	180.9		92.76
17	663	658.82	1,505.7		95.73
18	681	269.04	598.2		96.46
19	691	464.05	1,017.2		96.84
20	747	322.14	653.5		98.30
21	810	72.08	134.8		99.81
22	843	95.71	172.1		100.58
23	879	44.93	77.4		101.44
24	968	29.00	45.4		103.55
25	1,048	36.37	52.6		104.45

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 PM

Electropherogram Summary Continued ...

... Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,334	30.65	34.8		105.27
27	1,952	24.01	18.6		107.03
28	3,780	18.16	7.3		108.49
29	4,347	21.64	7.5		109.22
30	4,815	24.19	7.6		109.82
31	5,850	25.34	6.6		111.15
32	6,785	62.20	13.9		112.36
33	10,380	75.00	10.9	Upper Marker	113.00
34	26,970	0.00	0.0		114.80
35	44,350	0.00	0.0		116.70
36	51,855	0.00	0.0		117.51
37	64,101	0.00	0.0		118.84
38	73,976	0.00	0.0		119.92

Region table for sample 3 : sample 3

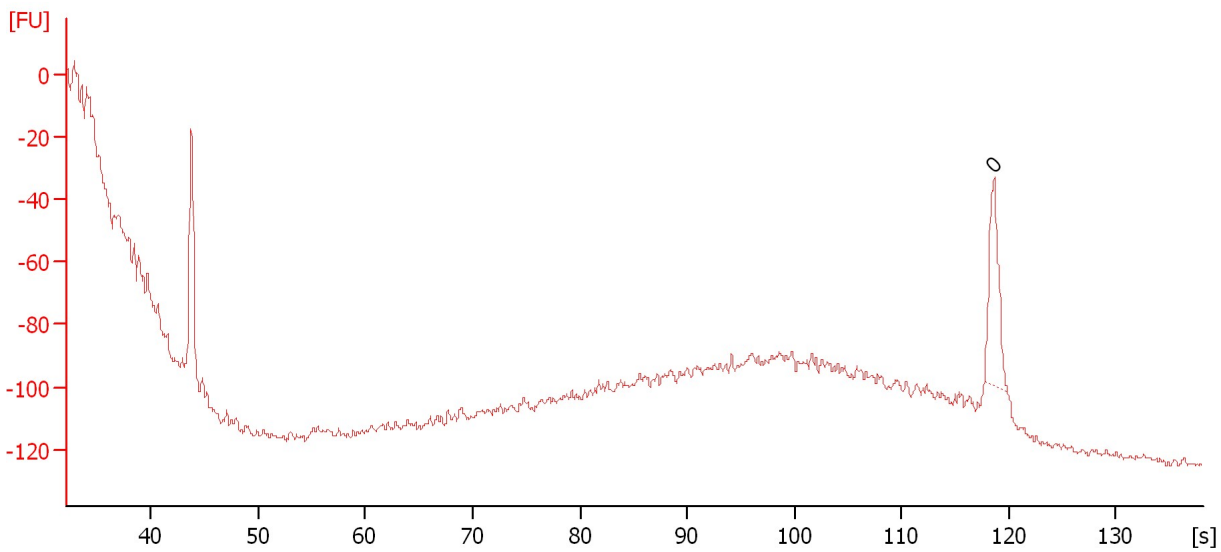
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	584	4,140.19	1,910.5	13,755.1	82	35.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
Modified: 5/2/2019 12:08:41 PM

Electropherogram Summary Continued ...

sample 4



Overall Results for sample 4 : sample 4

Number of peaks found: 0 Noise: 1.2

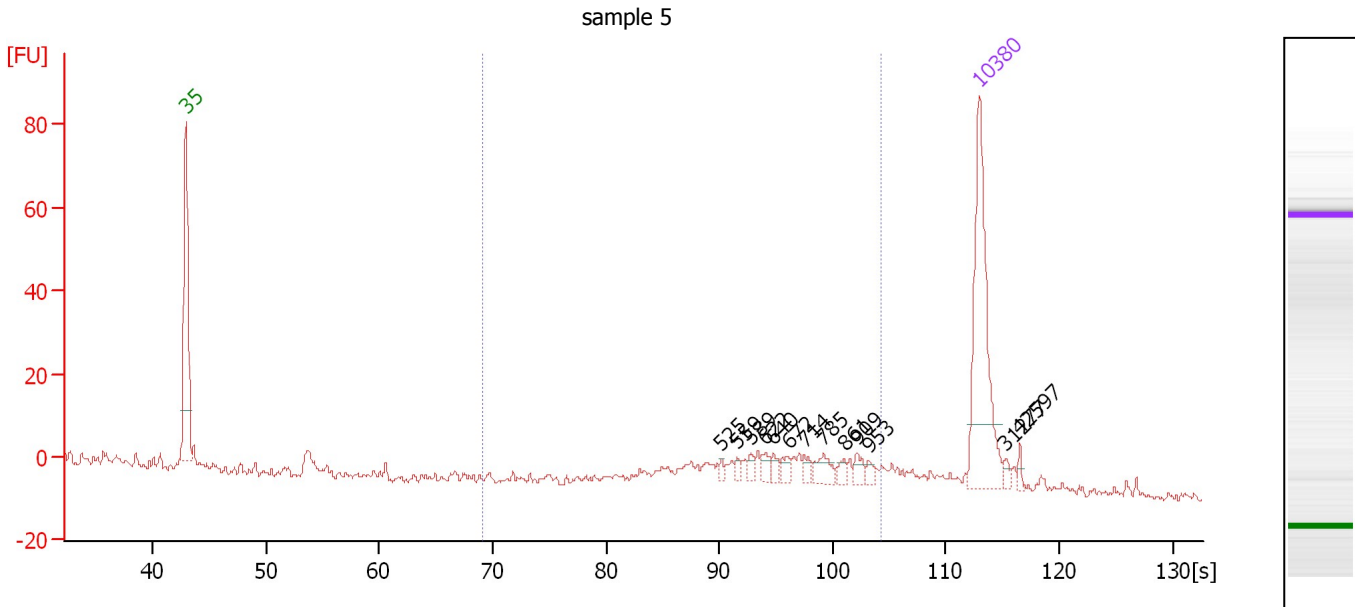
Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		118.60

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 13 Corr. Area 1: 116.7
 Noise: 1.0

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	525	2.74	7.9		90.22
3	559	3.15	8.5		91.59
4	589	3.68	9.5		92.78
5	622	5.15	12.5		94.10
6	640	4.37	10.3		94.81
7	672	5.68	12.8		96.09
8	714	4.32	9.2		97.51
9	785	9.54	18.4		99.22
10	861	4.21	7.4		101.02
11	909	5.89	9.8		102.15
12	953	3.58	5.7		103.20
13	10,380	75.00	10.9	Upper Marker	113.00
14	31,277	0.00	0.0		115.27
15	42,597	0.00	0.0		116.50

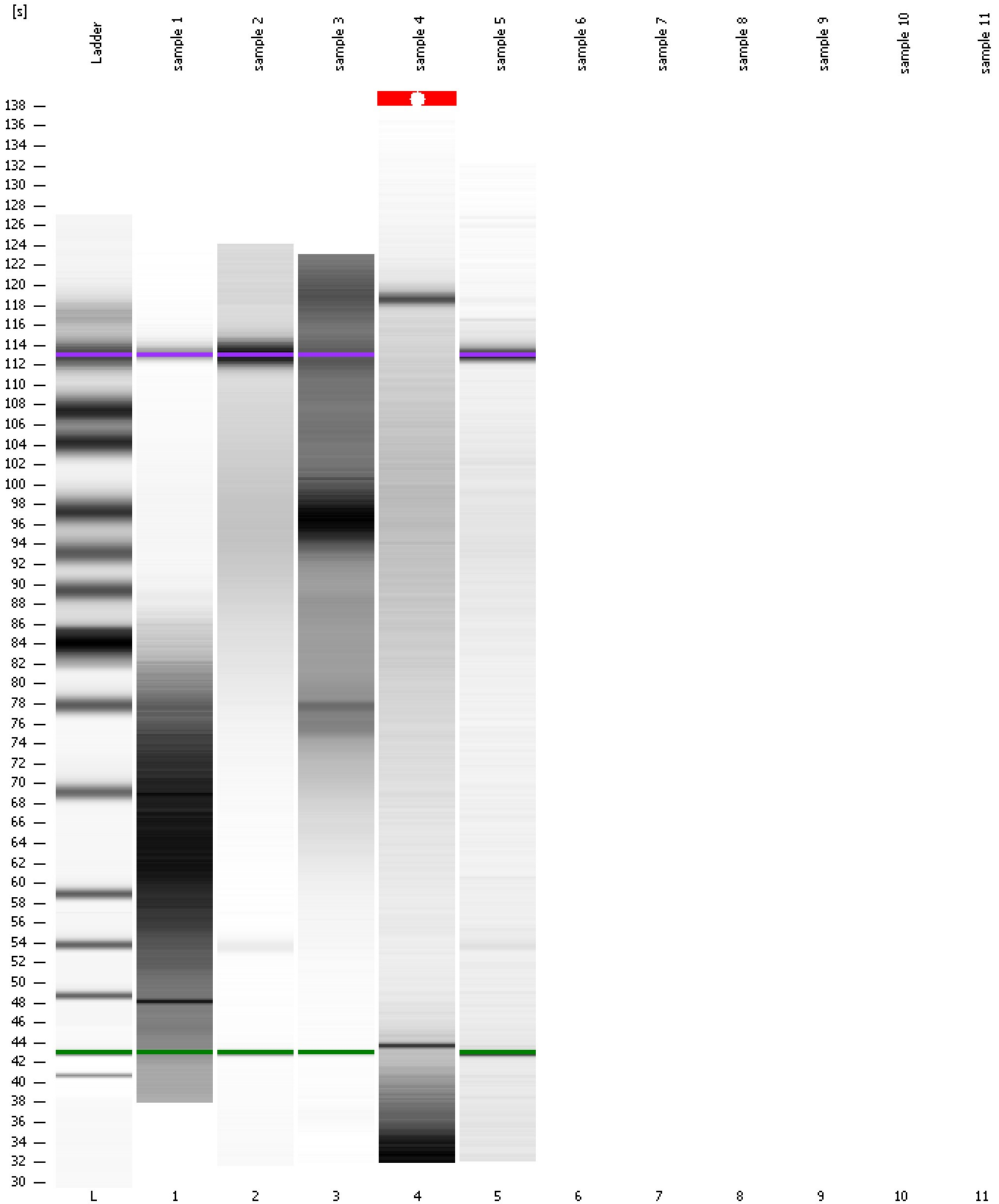
Region table for sample 5 : sample 5

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	659	107.99	116.7	276.0	57	26.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
Modified: 5/2/2019 12:08:41 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
Modified: 5/2/2019 12:08:41 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\2019-05-02\2019-05-02_002.xad

Created: 5/2/2019 11:44:31 AM
 Modified: 5/2/2019 12:08:41 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		5/2/2019 12:08:41 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\2019-05-02\2019-05-02_002.xad)		Instrument	Run		5/2/2019 11:44:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		5/2/2019 11:44:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/2/2019 11:44:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/2/2019 11:44:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		5/2/2019 11:44:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/2/2019 11:44:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/2/2019 11:44:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1