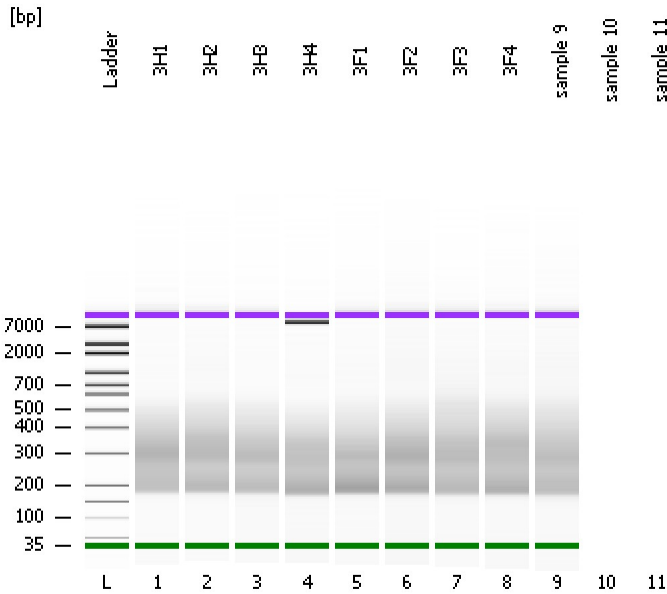


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
Modified: 6/6/2019 4:15:39 PM

Electrophoresis File Run Summary



Instrument Information:

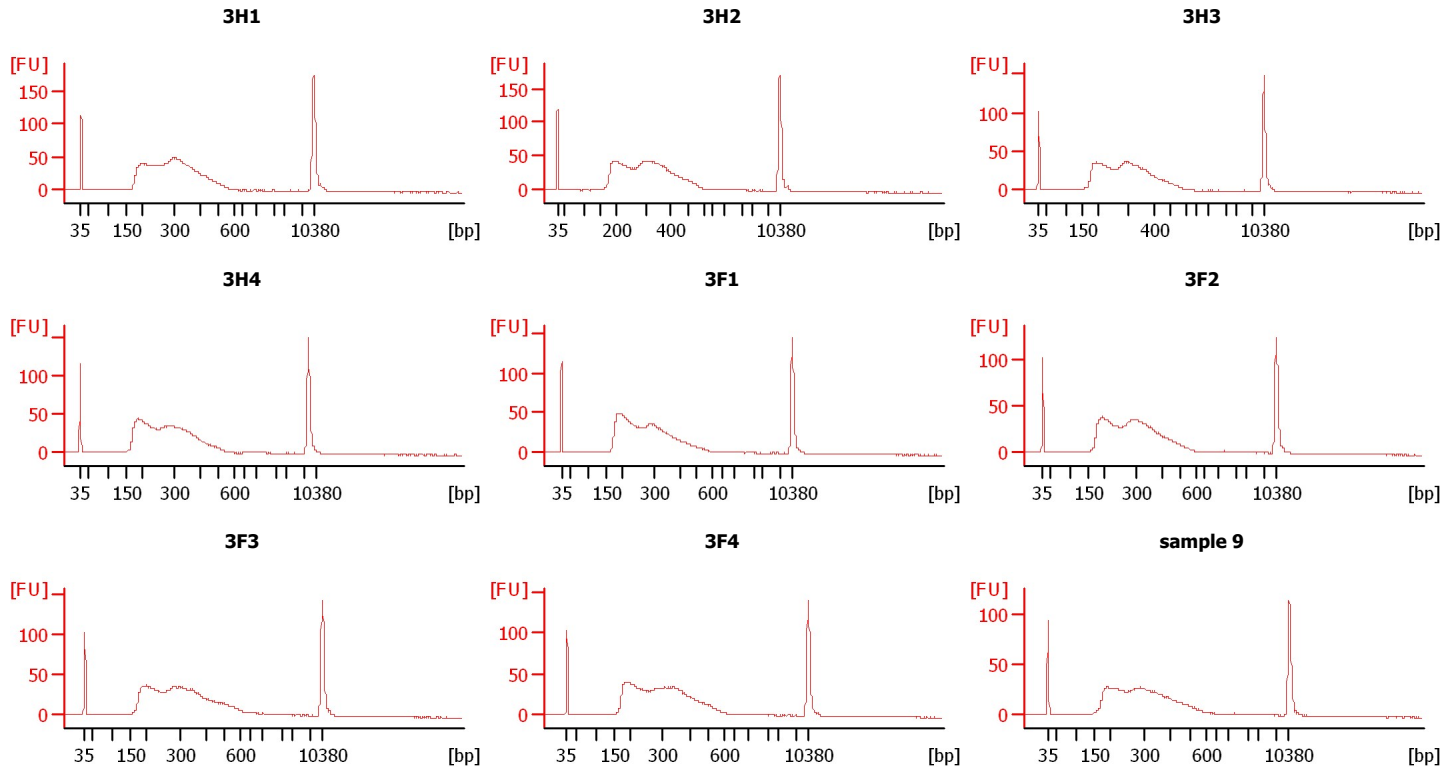
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
3H1		<input type="checkbox"/>	✓			
3H2		<input type="checkbox"/>	✓			
3H3		<input type="checkbox"/>	✓			
3H4		<input type="checkbox"/>	✓			
3F1		<input type="checkbox"/>	✓			
3F2		<input type="checkbox"/>	✓			
3F3		<input type="checkbox"/>	✓			
3F4		<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\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
Modified: 6/6/2019 4:15:39 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

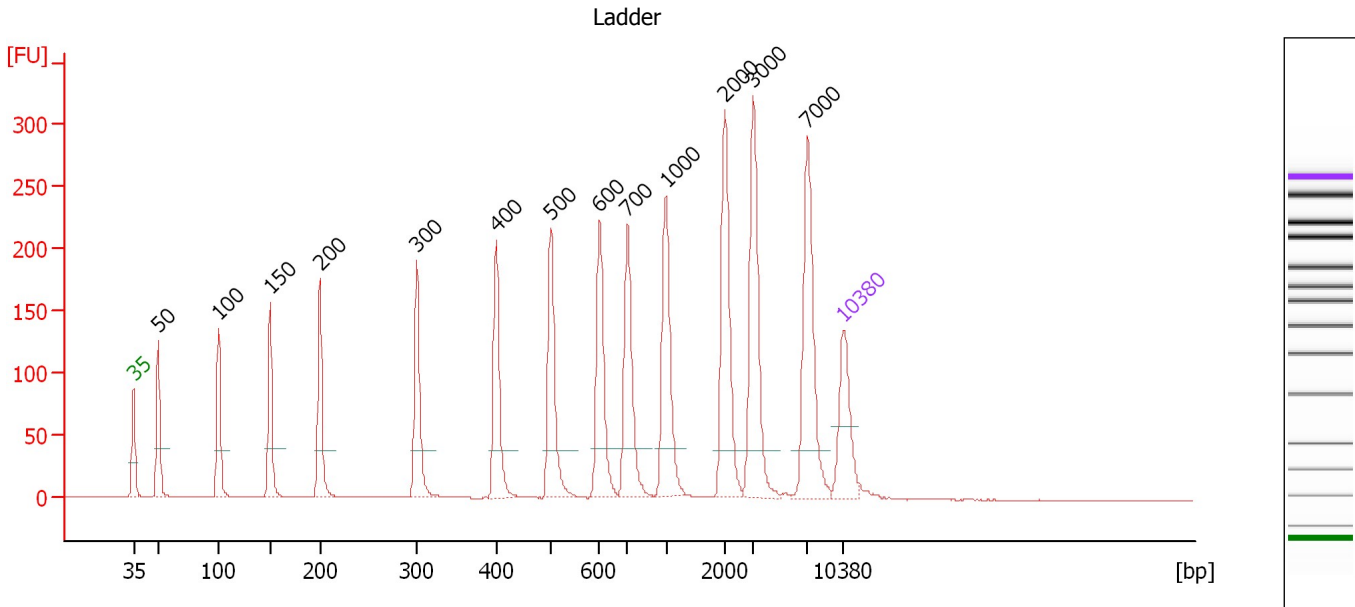
Ladder

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\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

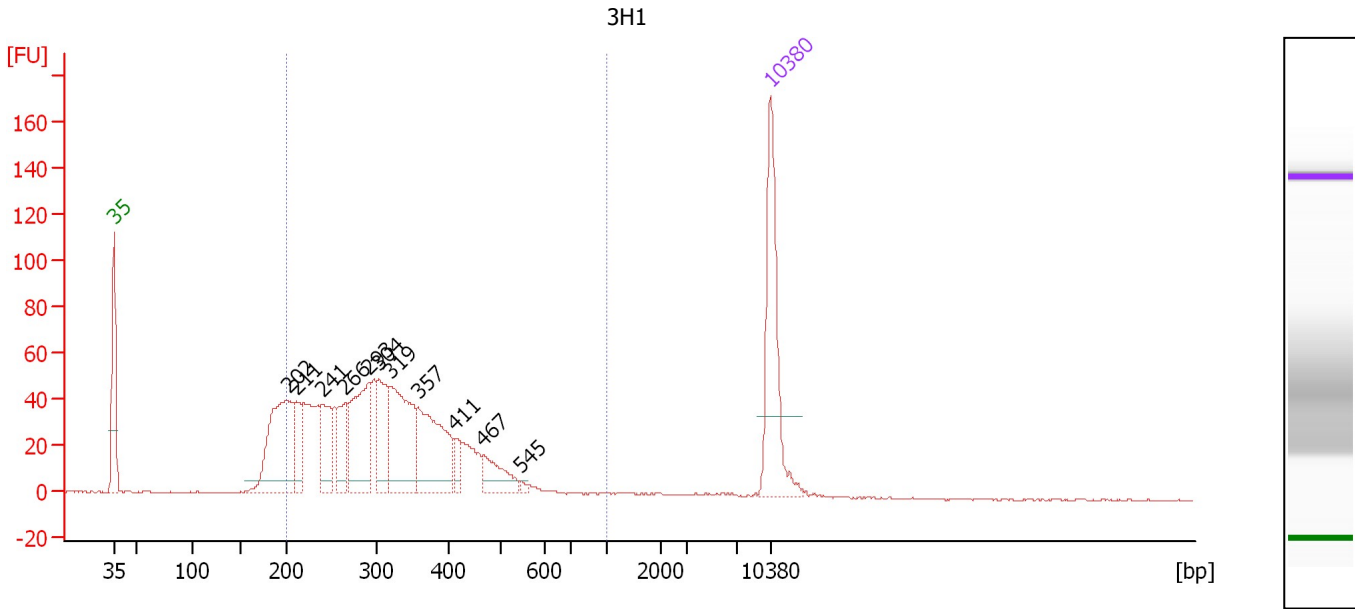
Peak table for Ladder

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	45.42
3	100	150.00	2,272.7	Ladder Peak	51.36
4	150	150.00	1,515.2	Ladder Peak	56.46
5	200	150.00	1,136.4	Ladder Peak	61.35
6	300	150.00	757.6	Ladder Peak	70.93
7	400	150.00	568.2	Ladder Peak	78.76
8	500	150.00	454.5	Ladder Peak	84.13
9	600	150.00	378.8	Ladder Peak	88.97
10	700	150.00	324.7	Ladder Peak	91.70
11	1,000	150.00	227.3	Ladder Peak	95.49
12	2,000	150.00	113.6	Ladder Peak	101.27
13	3,000	150.00	75.8	Ladder Peak	104.11
14	7,000	150.00	32.5	Ladder Peak	109.48
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 3H1

Number of peaks found: 11 Corr. Area 1: 1,186.6
 Noise: 0.3

Peak table for sample 1 : 3H1

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	202	127.95	960.9		61.52
3	211	33.01	237.4		62.38
4	241	45.94	288.9		65.27
5	266	35.52	202.4		67.66
6	293	88.26	457.1		70.22
7	304	49.88	248.6		71.24
8	319	97.32	461.9		72.43
9	357	89.30	379.1		75.39
10	411	11.37	41.9		79.36
11	467	26.65	86.4		82.38
12	545	2.51	7.0		86.30
13	10,380	75.00	10.9	Upper Marker	113.00

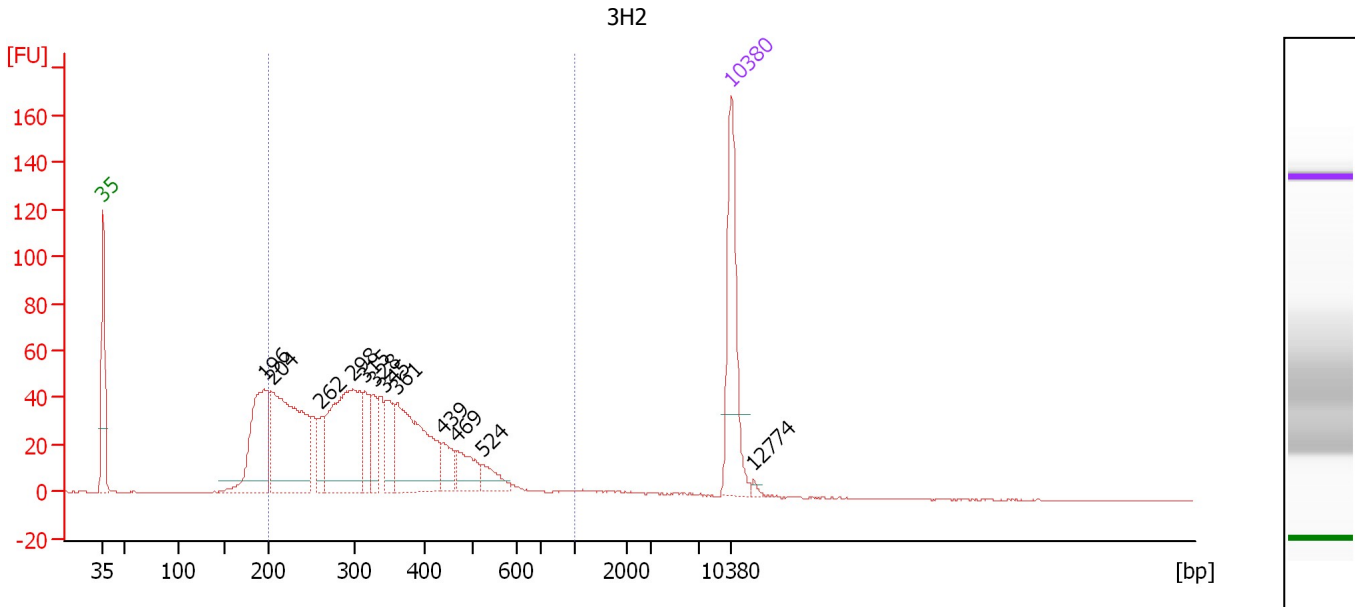
Region table for sample 1 : 3H1

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	324	694.32	1,186.6	3,557.9	87	29.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 3H2

Number of peaks found: 12 Corr. Area 1: 1,158.6
 Noise: 0.3

Peak table for sample 2 : 3H2

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	196	118.37	915.9		60.95
3	204	195.14	1,446.4		61.78
4	262	25.15	145.4		67.30
5	298	156.98	797.7		70.75
6	315	29.21	140.4		72.12
7	328	27.59	127.4		73.13
8	345	32.69	143.6		74.43
9	361	120.70	506.0		75.74
10	439	22.38	77.3		80.85
11	469	28.43	91.9		82.46
12	524	16.58	47.9		85.31
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,774	0.00	0.0		115.50

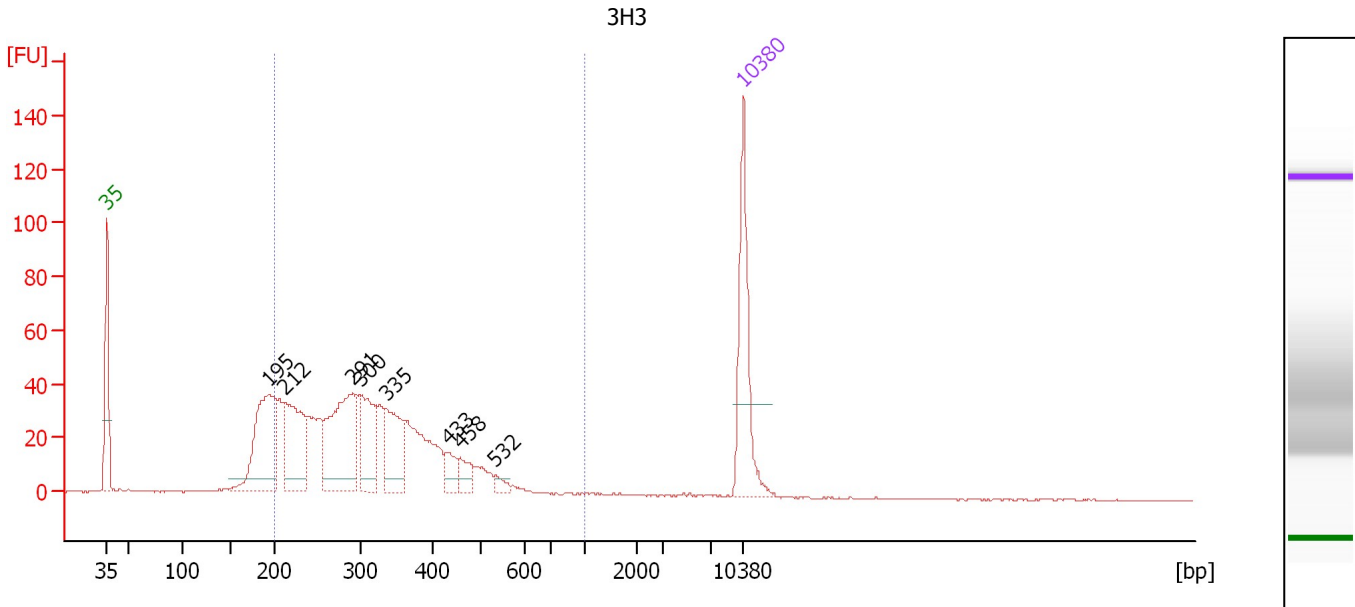
Region table for sample 2 : 3H2

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	334	751.64	1,158.6	3,796.2	86	31.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 3H3

Number of peaks found: 8 Corr. Area 1: 892.8
 Noise: 0.2

Peak table for sample 3 : 3H3

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	195	150.65	1,173.2		60.82
3	212	115.18	824.8		62.46
4	291	135.28	705.3		70.03
5	300	76.27	385.5		70.91
6	335	62.84	284.3		73.66
7	433	17.49	61.2		80.52
8	458	17.22	57.0		81.87
9	532	6.46	18.4		85.68
10	10,380	75.00	10.9	Upper Marker	113.00

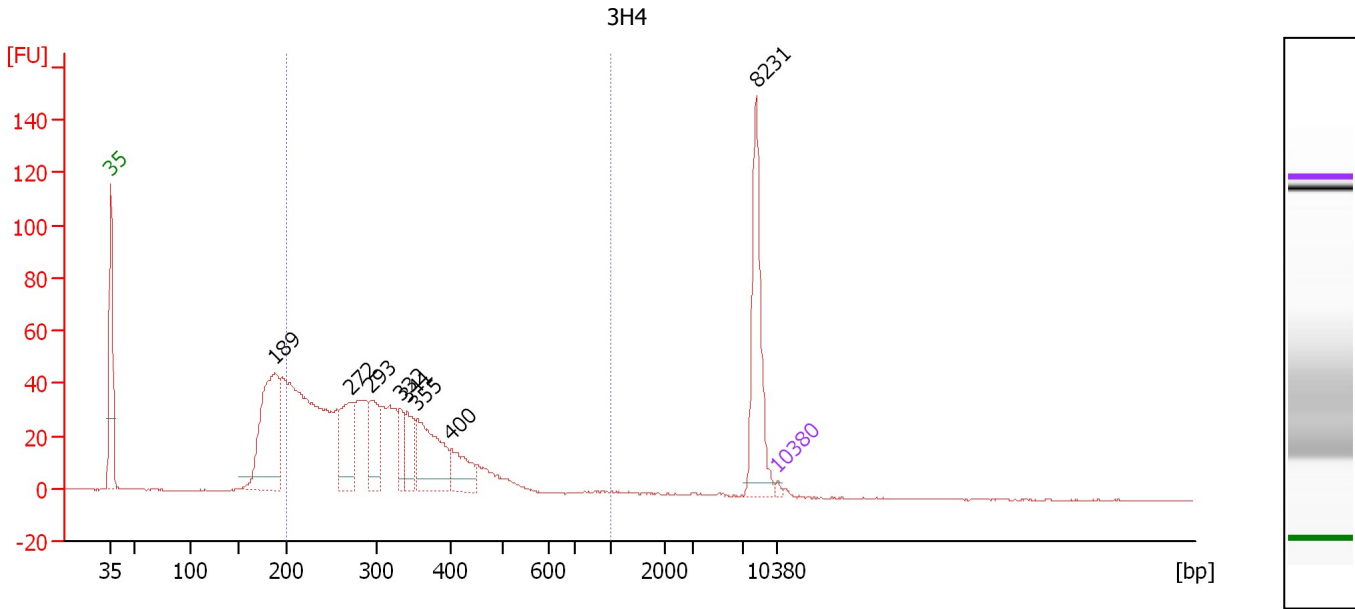
Region table for sample 3 : 3H3

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	321	723.05	892.8	3,738.6	85	28.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 3H4

Number of peaks found: 8 Corr. Area 1: 906.2
 Noise: 0.2

Peak table for sample 4 : 3H4

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	189	6,460.63	51,878.5		60.25
3	272	2,655.62	14,787.3		68.26
4	293	1,793.04	9,266.9		70.27
5	332	1,042.82	4,763.9		73.41
6	341	1,302.71	5,788.9		74.14
7	355	3,143.97	13,436.1		75.20
8	400	1,265.18	4,787.6		78.78
9	8,231	3,115.09	573.4		110.76
10	10,380	75.00	10.9	Upper Marker	113.00

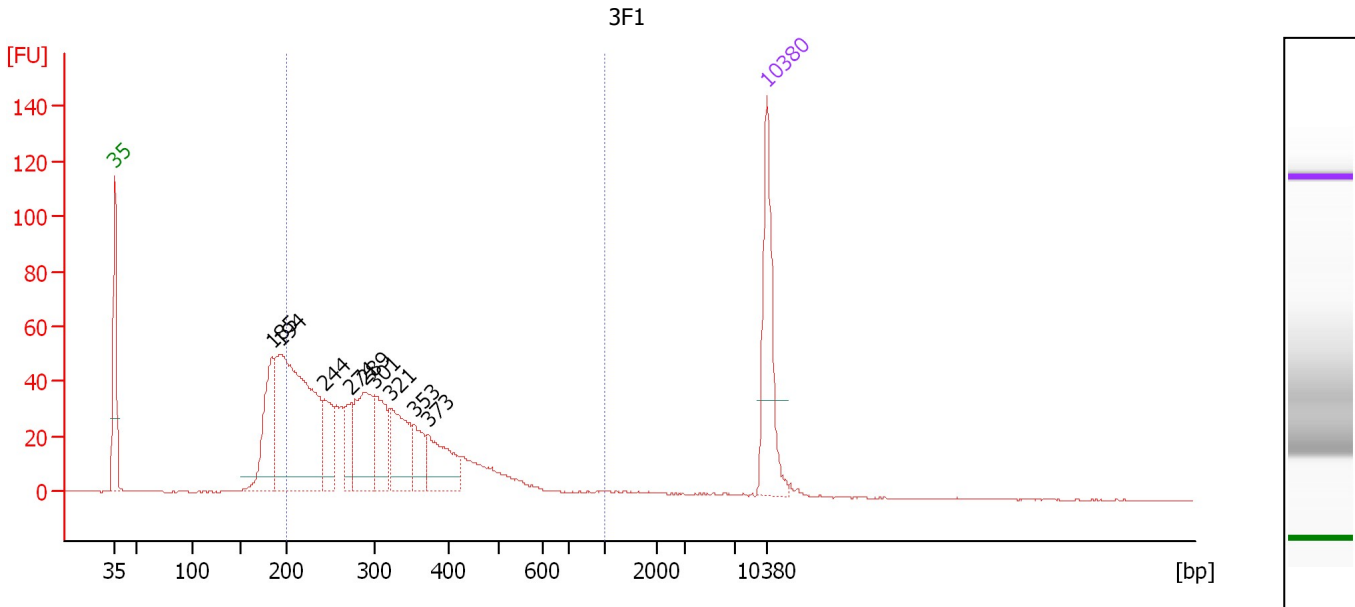
Region table for sample 4 : 3H4

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	310	29,345.04	906.2	156,057.4	70	29.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 3F1

Number of peaks found: 9 Corr. Area 1: 938.3
 Noise: 0.2

Peak table for sample 5 : 3F1

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	185	101.62	830.4		59.93
3	194	331.68	2,587.9		60.79
4	244	49.38	307.1		65.53
5	274	33.49	185.5		68.39
6	289	91.90	481.7		69.88
7	301	58.27	293.8		70.97
8	321	72.02	340.0		72.57
9	353	31.30	134.3		75.08
10	373	57.60	234.1		76.63
11	10,380	75.00	10.9	Upper Marker	113.00

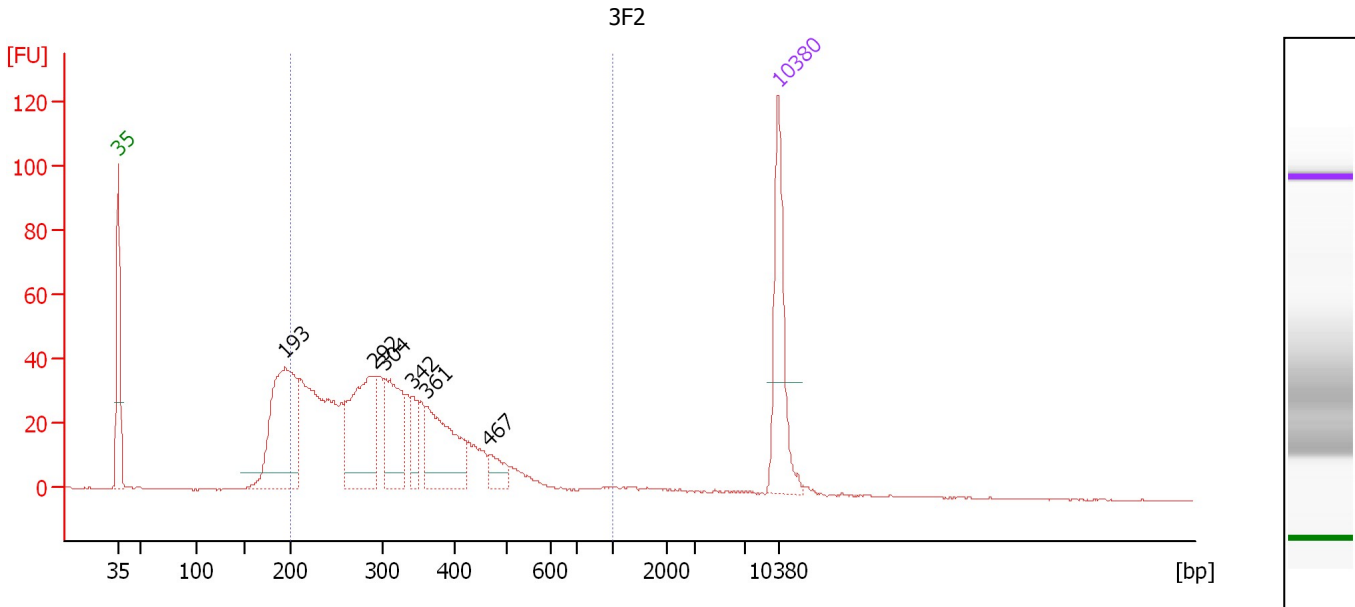
Region table for sample 5 : 3F1

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	315	765.70	938.3	4,082.3	79	32.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 3F2

Number of peaks found: 6 Corr. Area 1: 890.9
 Noise: 0.2

Peak table for sample 6 : 3F2

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	193	205.52	1,611.0		60.70
3	292	142.46	739.7		70.14
4	304	94.02	468.0		71.27
5	342	24.46	108.4		74.21
6	361	98.30	412.9		75.68
7	467	19.82	64.3		82.35
8	10,380	75.00	10.9	Upper Marker	113.00

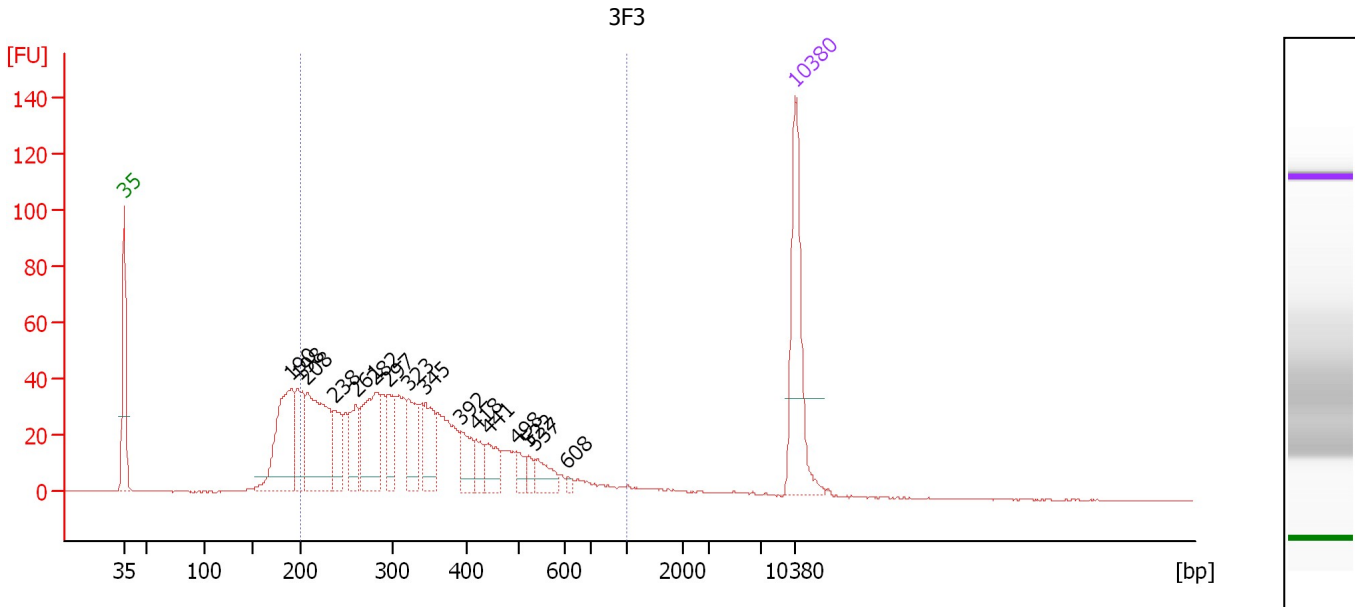
Region table for sample 6 : 3F2

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	326	807.45	890.9	4,165.9	82	32.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 3F3

Number of peaks found: 16 Corr. Area 1: 997.4
 Noise: 0.2

Peak table for sample 7 : 3F3

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	190	118.66	944.2		60.42
3	198	54.16	414.8		61.14
4	208	126.54	923.4		62.09
5	238	38.83	247.3		64.98
6	261	37.88	219.8		67.21
7	282	80.59	432.9		69.21
8	297	30.01	153.0		70.66
9	323	40.96	192.3		72.71
10	345	39.92	175.4		74.44
11	392	25.95	100.2		78.17
12	418	16.44	59.6		79.72
13	441	23.01	79.1		80.95
14	498	11.12	33.8		84.01
15	522	7.09	20.6		85.18
16	537	18.29	51.6		85.90
17	608	2.74	6.8		89.18
18	10,380	75.00	10.9	Upper Marker	113.00

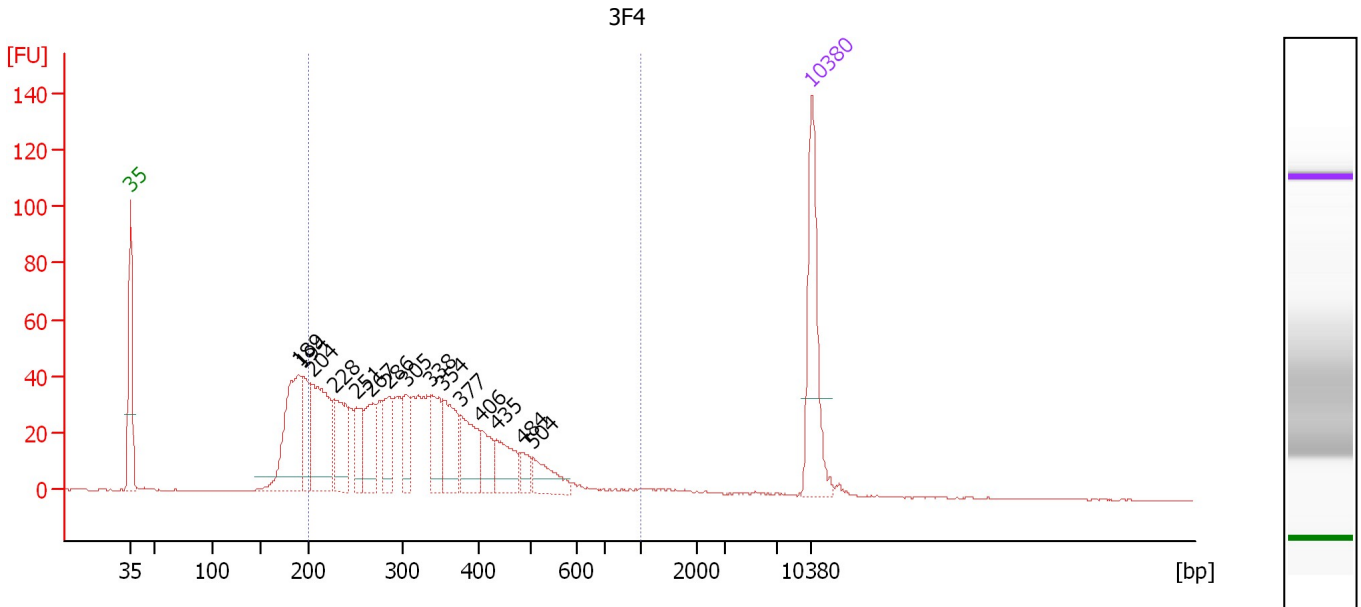
Region table for sample 7 : 3F3

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	347	759.61	997.4	3,795.4	83	35.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 3F4

Number of peaks found: 15 Corr. Area 1: 992.4
 Noise: 0.2

Peak table for sample 8 : 3F4

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	189	134.50	1,078.9		60.27
3	194	47.17	368.6		60.76
4	204	121.33	903.2		61.69
5	228	65.55	435.3		64.05
6	251	34.47	208.0		66.24
7	267	49.20	279.1		67.78
8	286	37.73	199.9		69.59
9	305	30.58	152.1		71.29
10	338	45.98	206.0		73.92
11	354	55.63	238.4		75.12
12	377	50.70	204.0		76.93
13	406	26.33	98.3		79.07
14	435	37.57	130.7		80.66
15	484	14.02	43.8		83.29
16	504	28.28	85.0		84.33
17	10,380	75.00	10.9	Upper Marker	113.00

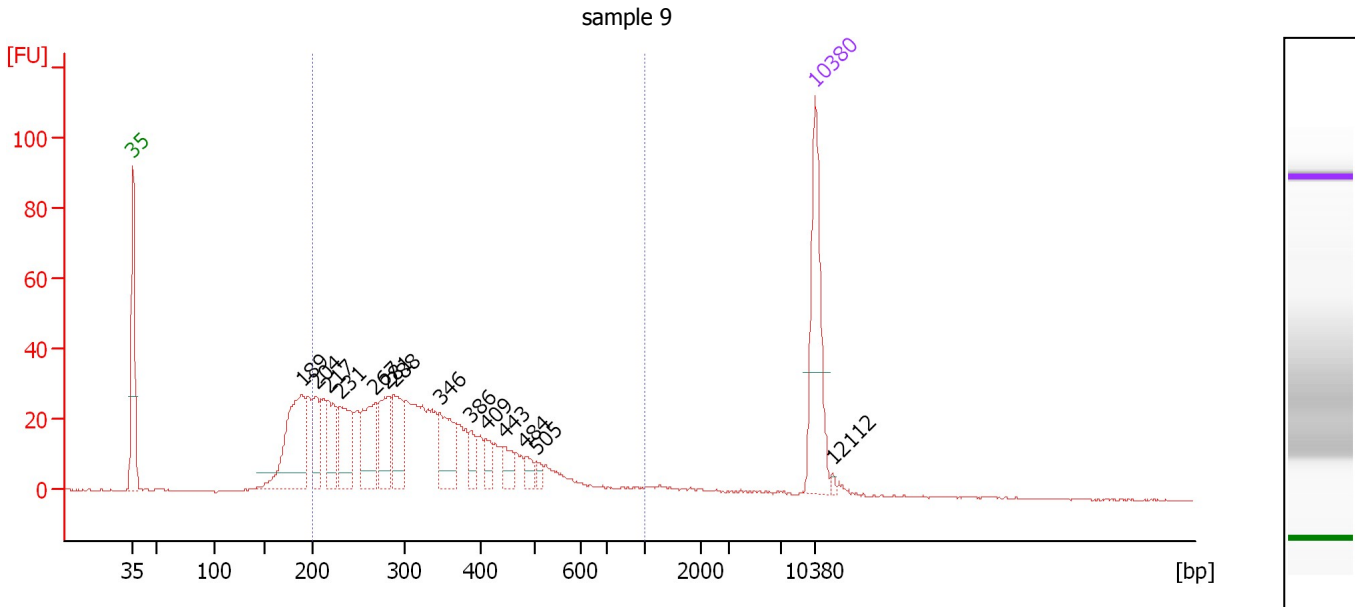
Region table for sample 8 : 3F4

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	335	809.07	992.4	4,109.3	81	32.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 14 Corr. Area 1: 740.5
 Noise: 0.2

Peak table for sample 9 : sample 9

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	189	127.08	1,017.9		60.29
3	204	34.85	258.3		61.77
4	217	46.21	322.7		62.98
5	231	63.98	420.3		64.29
6	267	65.59	371.8		67.79
7	281	54.62	294.5		69.11
8	288	50.16	264.0		69.76
9	346	52.60	230.4		74.52
10	386	13.73	53.8		77.70
11	409	13.14	48.7		79.23
12	443	16.15	55.2		81.09
13	484	9.92	31.0		83.28
14	505	6.05	18.1		84.38
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,112	0.00	0.0		114.81

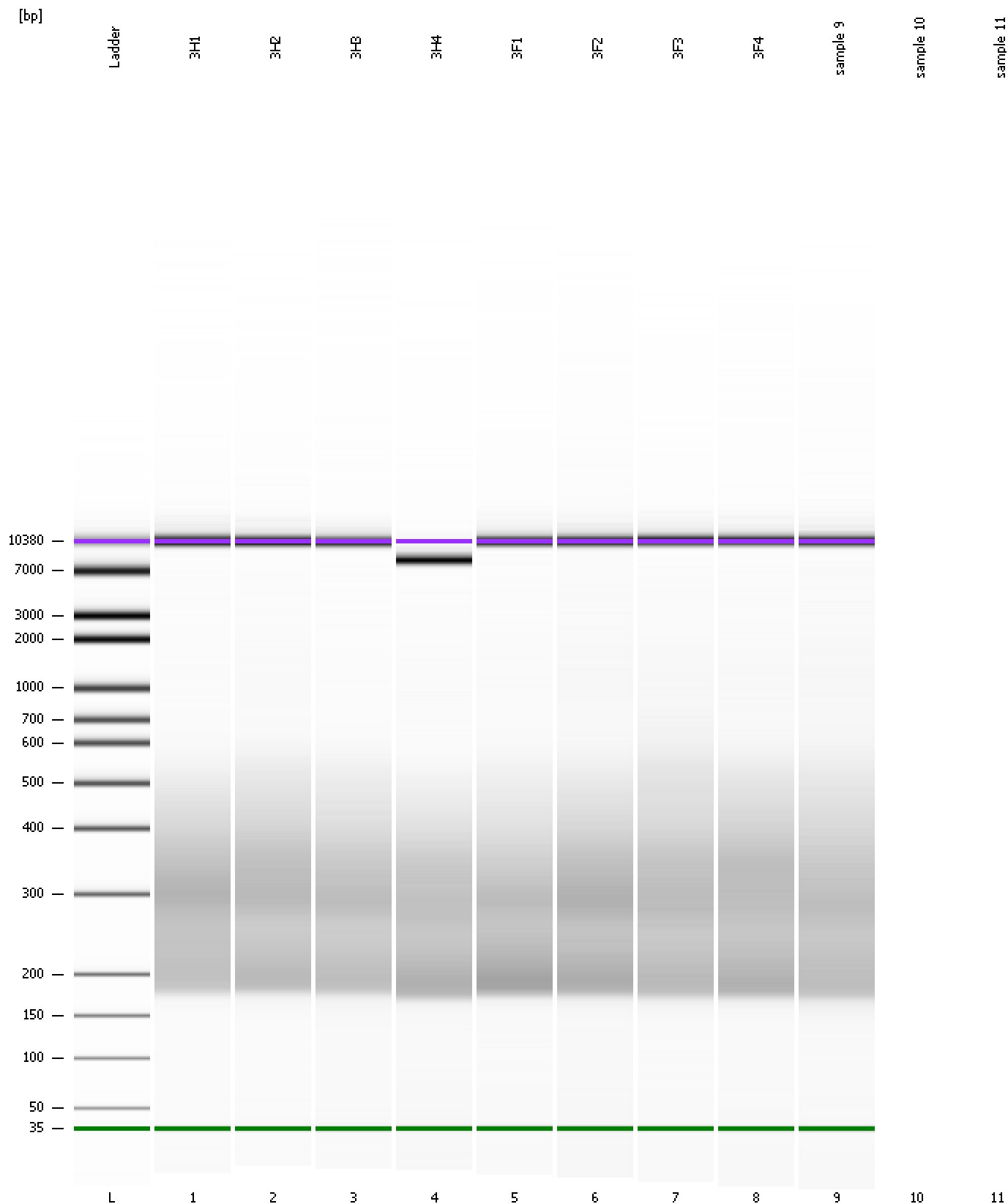
Region table for sample 9 : sample 9

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	337	759.63	740.5	3,861.1	80	34.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
Modified: 6/6/2019 4:15:39 PM

Gel Image

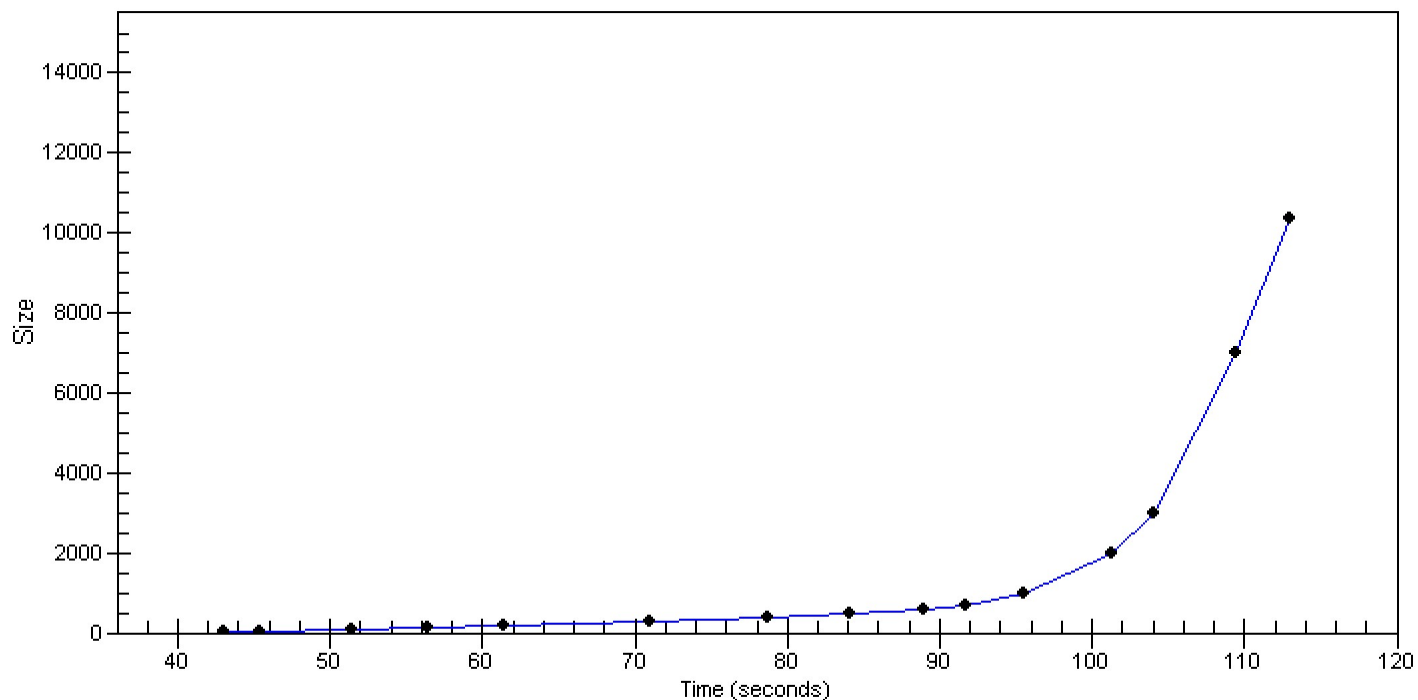


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
Modified: 6/6/2019 4:15:39 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
Modified: 6/6/2019 4:15:39 PM

Invalid Samples

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\2019-06-06\2019-06-06_002.xad

Created: 6/6/2019 2:57:31 PM
 Modified: 6/6/2019 4:15:39 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		6/6/2019 3:33:04 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\2019-06-06\2019-06-06_002.xad)		Instrument	Run		6/6/2019 2:57:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		6/6/2019 2:57:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/6/2019 2:57:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/6/2019 2:57:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		6/6/2019 2:57:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/6/2019 2:57:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/6/2019 2:57:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1