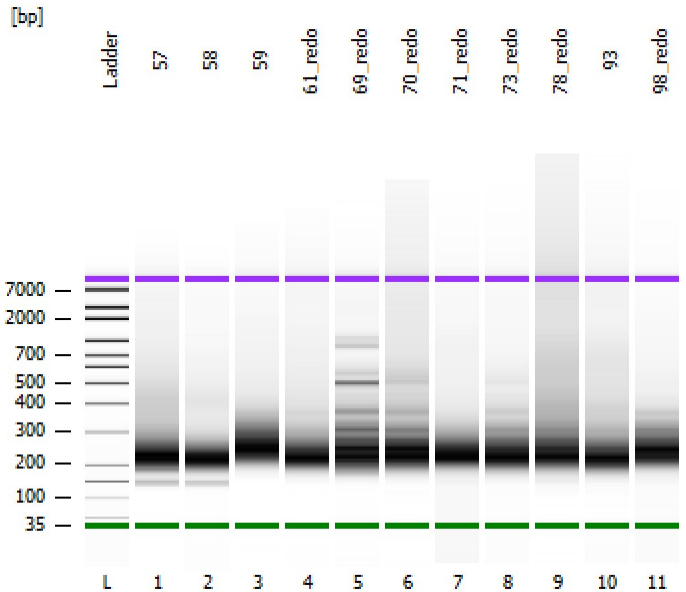


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
Modified: 11/22/2019 1:56:02 PM

Electrophoresis File Run Summary



Instrument Information:

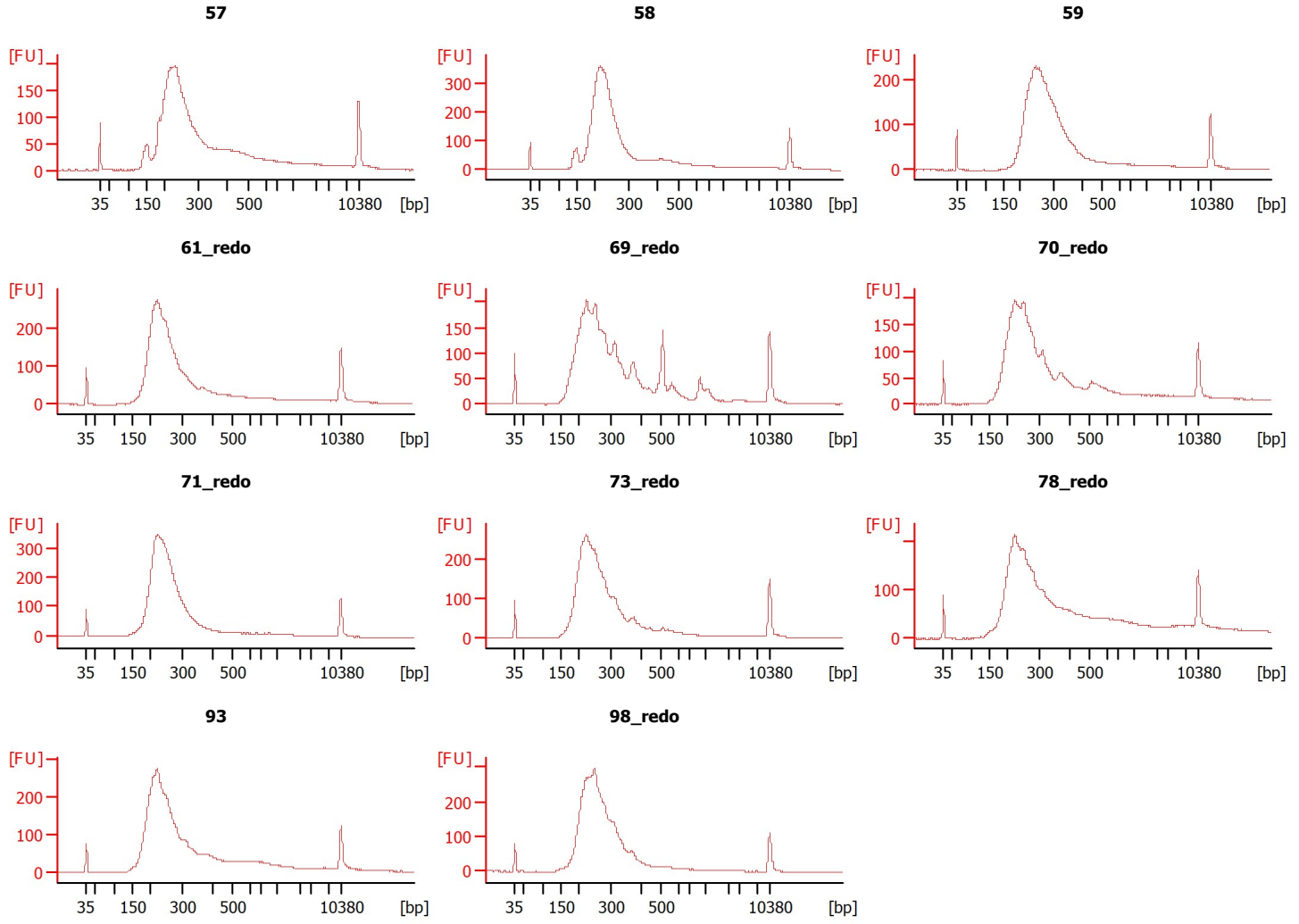
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

Assay Information:

Assay Origin Path: C:\Program Files (x86)\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: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
57		<input type="checkbox"/>	✓			
58		<input type="checkbox"/>	✓			
59		<input type="checkbox"/>	✓			
61_redo		<input type="checkbox"/>	✓			
69_redo		<input type="checkbox"/>	✓			
70_redo		<input type="checkbox"/>	✓			
71_redo		<input type="checkbox"/>	✓			
73_redo		<input type="checkbox"/>	✓			
78_redo		<input type="checkbox"/>	✓			
93		<input type="checkbox"/>	✓			
98_redo		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 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

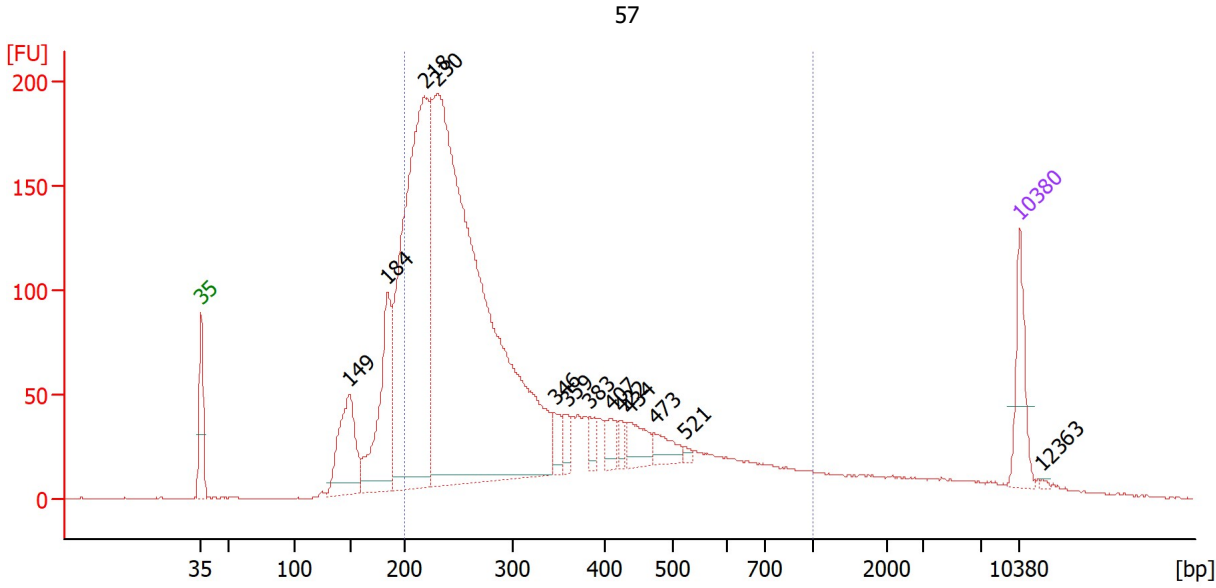
Ladder

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: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary



Overall Results for sample 1 : 57

Number of peaks found: 13 Corr. Area 1: 3,055.5
 Noise: 0.3

Peak table for sample 1 : 57

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	149	220.07	2,232.7	
3	184	295.80	2,429.3	
4	218	1,082.85	7,510.6	
5	230	2,095.38	13,812.8	
6	346	36.46	159.7	
7	359	32.15	135.9	
8	383	27.88	110.3	
9	407	37.28	138.9	
10	422	19.04	68.4	
11	434	59.58	208.1	
12	473	41.26	132.2	
13	521	6.38	18.5	
14	10,380	75.00	10.9	Upper Marker
15	12,363	0.00	0.0	

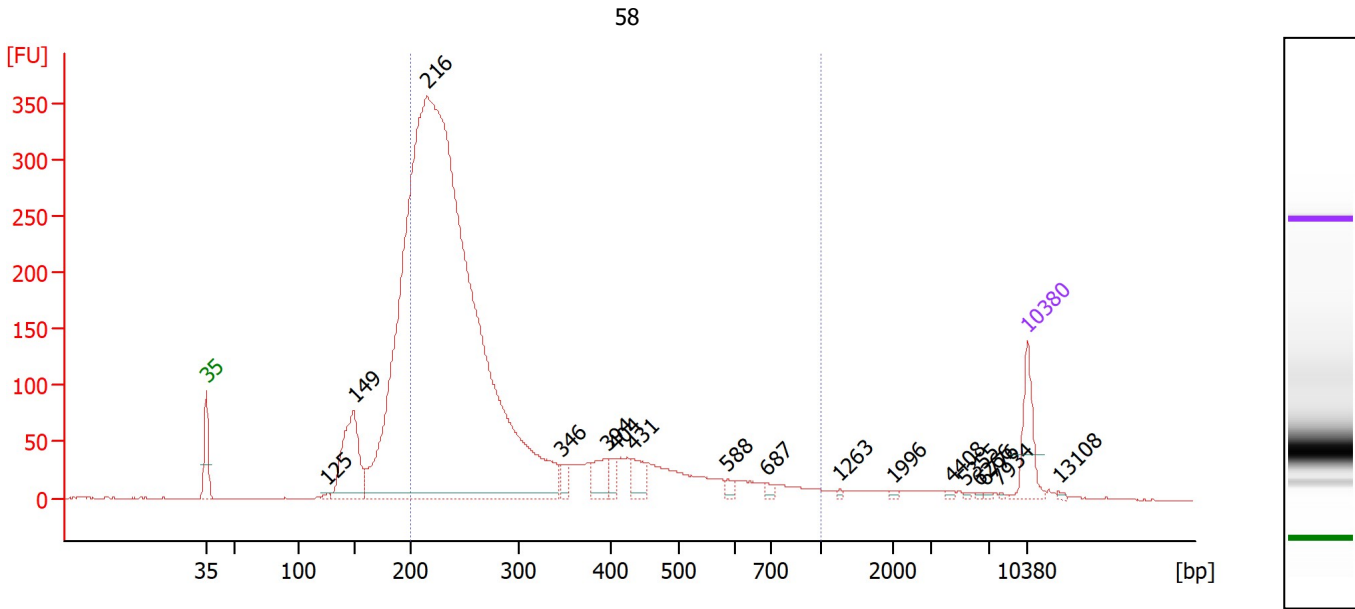
Region table for sample 1 : 57

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	3,055.5	80	323	43.6	3,787.52	20,912.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 58

Number of peaks found: 17 Corr. Area 1: 4,104.8
 Noise: 0.3

Peak table for sample 2 : 58

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	125	7.67	93.0	
3	149	281.61	2,866.9	
4	216	4,579.47	32,172.5	
5	346	27.35	119.9	
6	394	61.20	235.3	
7	404	30.01	112.7	
8	431	51.62	181.3	
9	588	12.90	33.3	
10	687	9.76	21.5	
11	1,263	3.96	4.7	
12	1,996	3.97	3.0	
13	4,408	3.74	1.3	
14	5,355	2.62	0.7	
15	6,266	2.57	0.6	
16	6,776	2.85	0.6	
17	7,934	1.86	0.4	
18	10,380	75.00	10.9	Upper Marker
19	13,108	0.00	0.0	

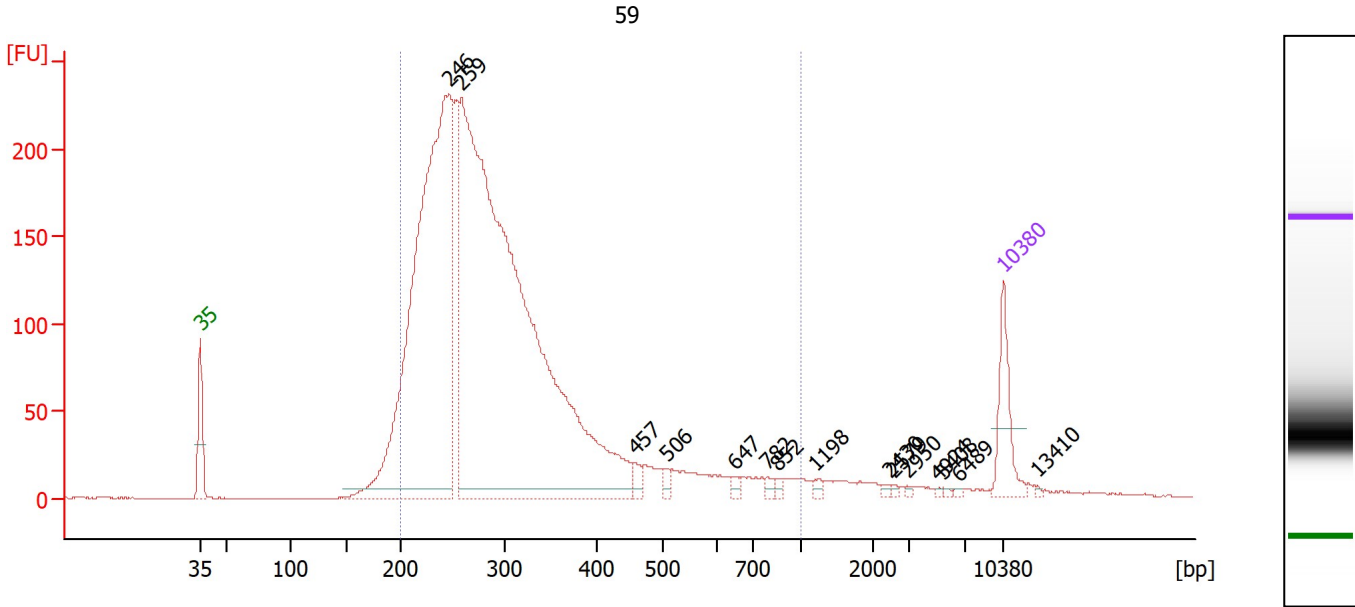
Region table for sample 2 : 58

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	4,104.8	79	291	41.8	4,138.46	24,523.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 59

Number of peaks found: 15 Corr. Area 1: 3,813.0
 Noise: 0.2

Peak table for sample 3 : 59

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	246	1,520.52	9,364.3	
3	259	2,471.79	14,480.1	
4	457	16.67	55.2	
5	506	13.66	40.9	
6	647	9.81	23.0	
7	782	8.25	16.0	
8	852	5.91	10.5	
9	1,198	6.75	8.5	
10	2,430	4.77	3.0	
11	2,579	3.33	2.0	
12	2,950	3.39	1.7	
13	4,924	2.34	0.7	
14	5,408	2.84	0.8	
15	6,489	3.00	0.7	
16	10,380	75.00	10.9	Upper Marker
17	13,410	0.00	0.0	

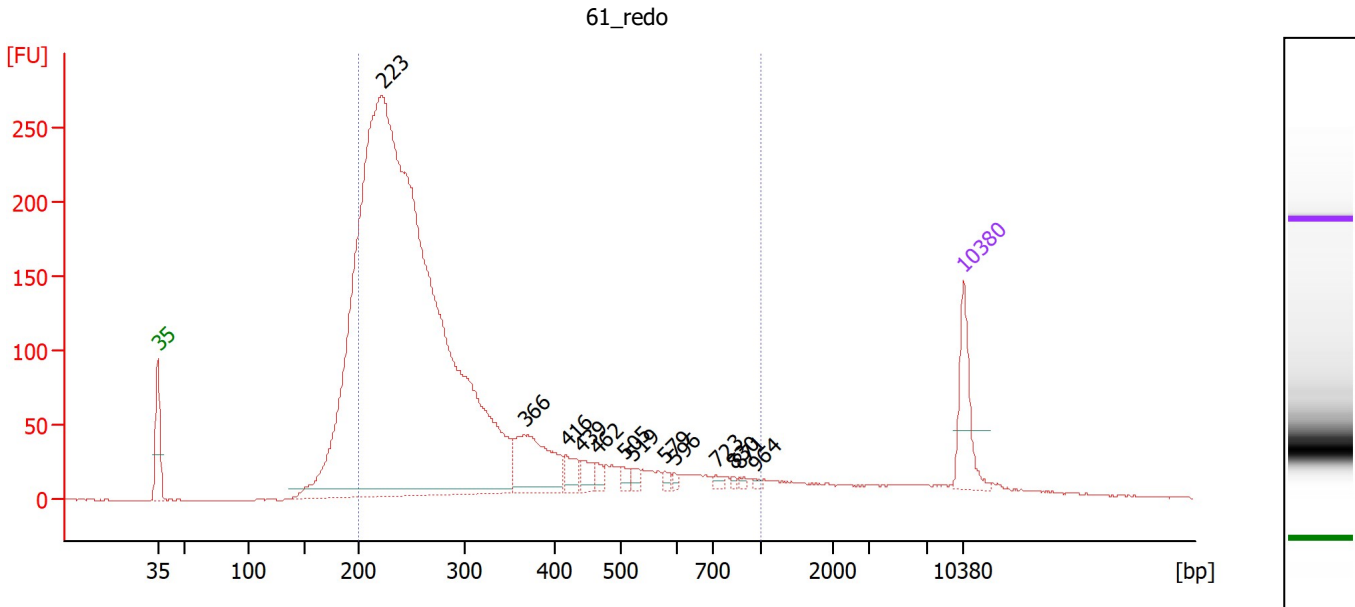
Region table for sample 3 : 59

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	3,813.0	94	306	35.9	4,001.83	21,798.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 61_redo

Number of peaks found: 13 Corr. Area 1: 3,658.1
 Noise: 0.3

Peak table for sample 4 : 61_redo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	223	3,563.42	24,218.8	
3	366	164.77	682.4	
4	416	32.42	118.1	
5	439	26.36	90.9	
6	462	15.25	50.0	
7	505	12.54	37.6	
8	519	10.73	31.4	
9	579	8.45	22.1	
10	596	6.12	15.6	
11	723	6.50	13.6	
12	830	3.61	6.6	
13	871	4.15	7.2	
14	964	3.01	4.7	
15	10,380	75.00	10.9	Upper Marker

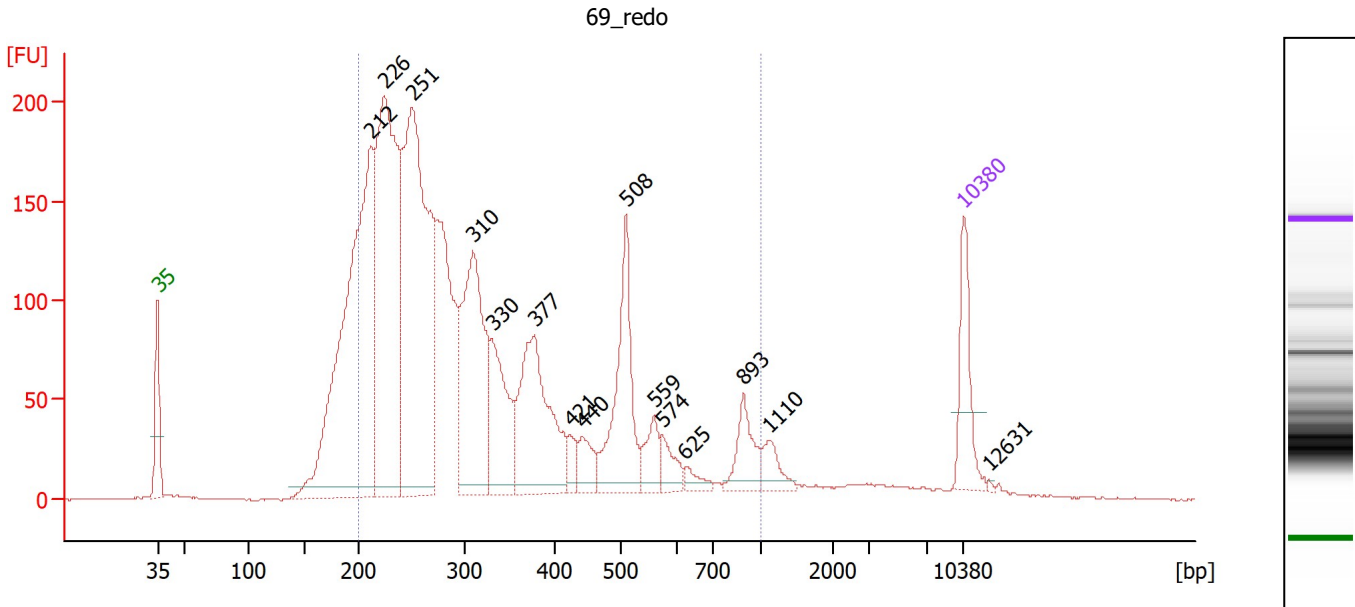
Region table for sample 4 : 61_redo

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	1,000	3,658.1	85	302	42.3	3,447.86	19,711.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 69_redo

Number of peaks found: 15 Corr. Area 1: 3,749.1
 Noise: 0.4

Peak table for sample 5 : 69_redo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	212	837.75	5,984.8	
3	226	684.65	4,600.0	
4	251	760.67	4,586.7	
5	310	348.40	1,702.5	
6	330	168.15	770.9	
7	377	267.91	1,077.0	
8	421	26.22	94.3	
9	440	43.23	148.7	
10	508	198.35	591.1	
11	559	44.92	121.7	
12	574	35.78	94.5	
13	625	16.77	40.7	
14	893	58.92	99.9	
15	1,110	30.38	41.5	
16	10,380	75.00	10.9	Upper Marker
17	12,631	0.00	0.0	

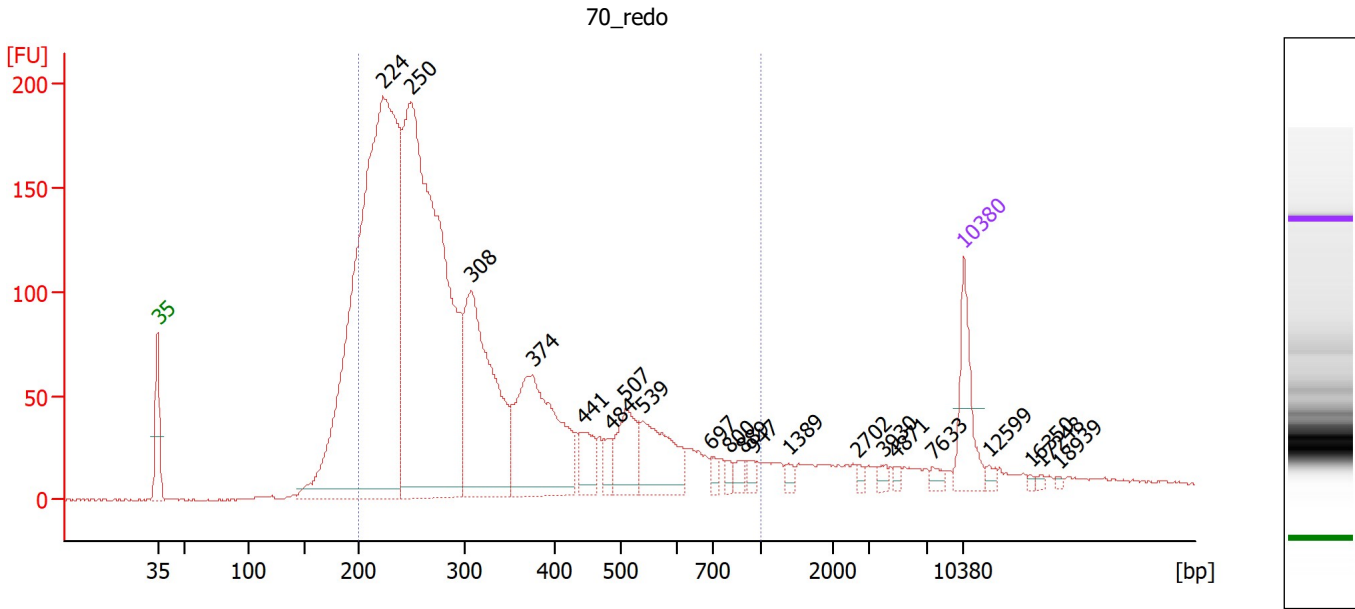
Region table for sample 5 : 69_redo

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	3,749.1	85	338	44.6	3,484.50	18,512.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 70_redo

Number of peaks found: 21 Corr. Area 1: 3,317.6
 Noise: 0.5

Peak table for sample 6 : 70_redo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	224	1,634.16	11,069.9	
3	250	1,320.54	7,994.3	
4	308	445.05	2,190.2	
5	374	334.47	1,353.6	
6	441	56.66	194.6	
7	484	27.62	86.5	
8	507	91.81	274.1	
9	539	127.04	357.4	
10	697	12.47	27.1	
11	800	9.88	18.7	
12	889	13.78	23.5	
13	947	10.46	16.7	
14	1,389	9.30	10.2	
15	2,702	6.23	3.5	
16	3,930	9.05	3.5	
17	4,871	5.74	1.8	
18	7,633	9.61	1.9	
19	10,380	75.00	10.9	Upper Marker
20	12,599	0.00	0.0	
21	16,350	0.00	0.0	
22	17,248	0.00	0.0	
23	18,939	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...

... Region table for sample 6 :

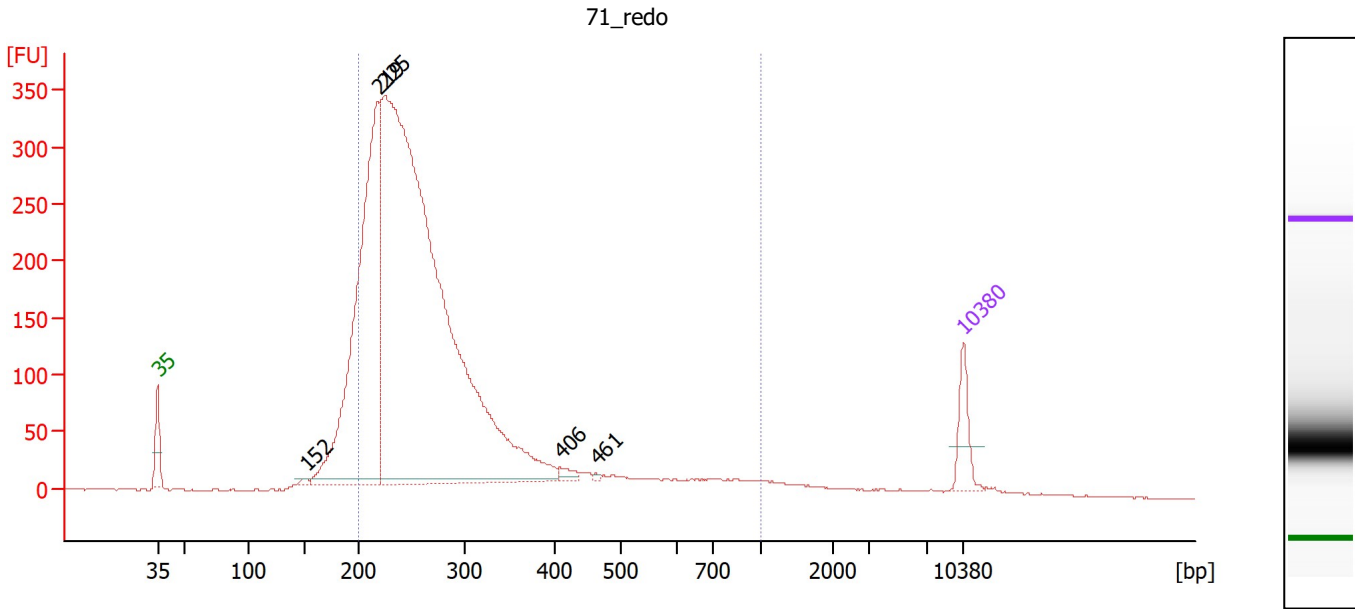
70_redo

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	3,317.6	85	326	42.4	3,666.77	19,860.9	■

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 71_redo

Number of peaks found: 5 Corr. Area 1: 4,469.2
 Noise: 0.7

Peak table for sample 7 : 71_redo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	152	11.81	118.0	
3	219	1,427.64	9,872.9	
4	225	3,870.36	26,023.9	
5	406	22.19	82.8	
6	461	4.77	15.7	
7	10,380	75.00	10.9	Upper Marker

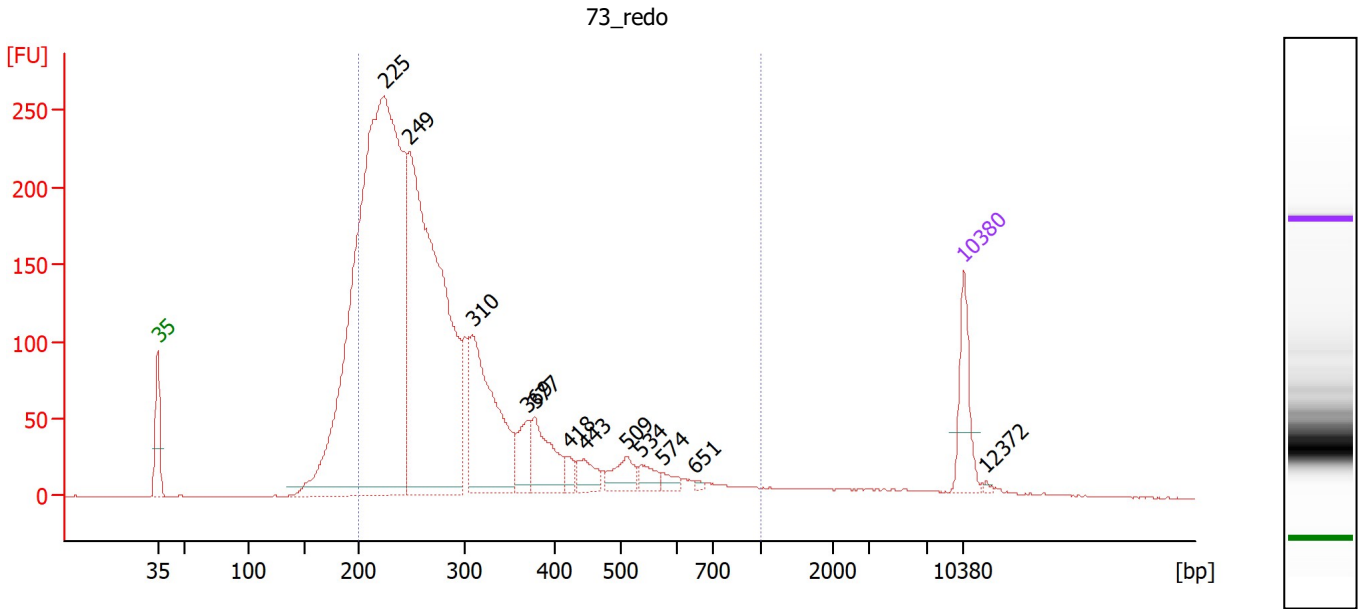
Region table for sample 7 : 71_redo

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	4,469.2	88	286	38.8	5,046.82	29,435.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 73_redo

Number of peaks found: 12 Corr. Area 1: 3,699.9
 Noise: 0.3

Peak table for sample 8 : 73_redo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	225	2,072.57	13,955.7	
3	249	1,150.38	7,004.9	
4	310	360.41	1,761.8	
5	369	67.33	276.5	
6	377	112.05	450.4	
7	418	21.36	77.4	
8	443	40.39	138.3	
9	509	45.63	135.9	
10	534	27.04	76.7	
11	574	14.44	38.1	
12	651	4.23	9.8	
13	10,380	75.00	10.9	Upper Marker
14	12,372	0.00	0.0	

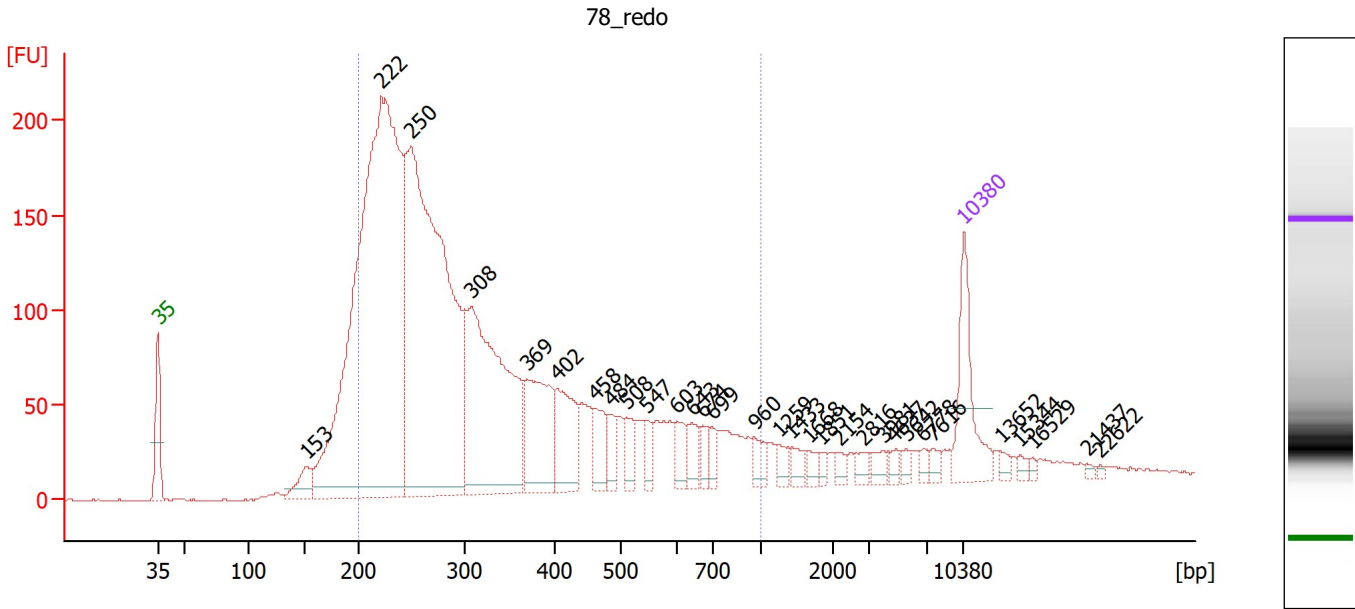
Region table for sample 8 : 73_redo

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	3,699.9	86	296	37.3	3,652.02	20,752.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 78_redo

Number of peaks found: 31 Corr. Area 1: 3,718.7
 Noise: 0.4

Peak table for sample 9 : 78_redo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	153	40.97	405.9	
3	222	1,266.29	8,639.5	
4	250	906.21	5,494.4	
5	308	424.89	2,087.2	
6	369	141.89	582.3	
7	402	92.08	347.2	
8	458	44.72	147.9	
9	484	25.24	79.1	
10	508	29.81	88.9	
11	547	19.48	53.9	
12	603	25.45	64.0	
13	643	24.88	58.6	
14	674	16.50	37.1	
15	699	15.99	34.7	
16	960	19.74	31.2	
17	1,259	12.65	15.2	
18	1,433	13.45	14.2	
19	1,668	9.79	8.9	
20	1,851	6.30	5.2	
21	2,154	7.75	5.4	
22	2,816	10.76	5.8	
23	3,981	11.22	4.3	
24	4,637	7.81	2.6	
25	5,642	7.36	2.0	
26	6,778	6.44	1.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...

... Peak table for sample 9 : 78 redo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	7,616	8.01	1.6	
28	10,380	75.00	10.9	Upper Marker
29	13,652	0.00	0.0	
30	15,344	0.00	0.0	
31	16,529	0.00	0.0	
32	21,437	0.00	0.0	
33	22,622	0.00	0.0	

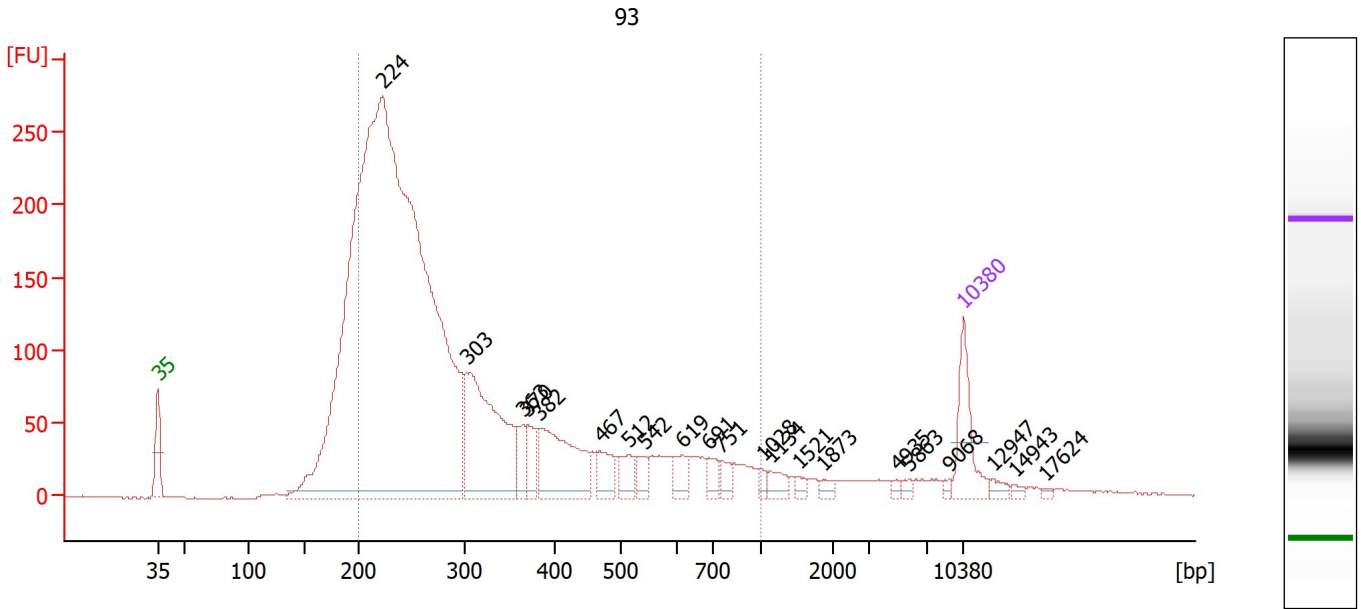
Region table for sample 9 : 78 redo

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	1,000	3,718.7	81	349	45.5	2,920.62	15,310.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 93

Number of peaks found: 21 Corr. Area 1: 3,766.5
 Noise: 0.6

Peak table for sample 10 : 93

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	224	3,246.64	21,980.2	
3	303	369.10	1,848.5	
4	363	42.88	178.8	
5	370	44.61	182.9	
6	382	189.21	750.6	
7	467	46.85	151.9	
8	512	39.29	116.3	
9	542	25.72	71.9	
10	619	33.33	81.6	
11	691	25.23	55.3	
12	751	22.36	45.1	
13	1,028	11.40	16.8	
14	1,134	22.17	29.6	
15	1,521	9.74	9.7	
16	1,873	9.69	7.8	
17	4,935	5.93	1.8	
18	5,863	7.26	1.9	
19	9,068	4.86	0.8	
20	10,380	75.00	10.9	Upper Marker
21	12,947	0.00	0.0	
22	14,943	0.00	0.0	
23	17,624	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...

... Region table for sample 10 :

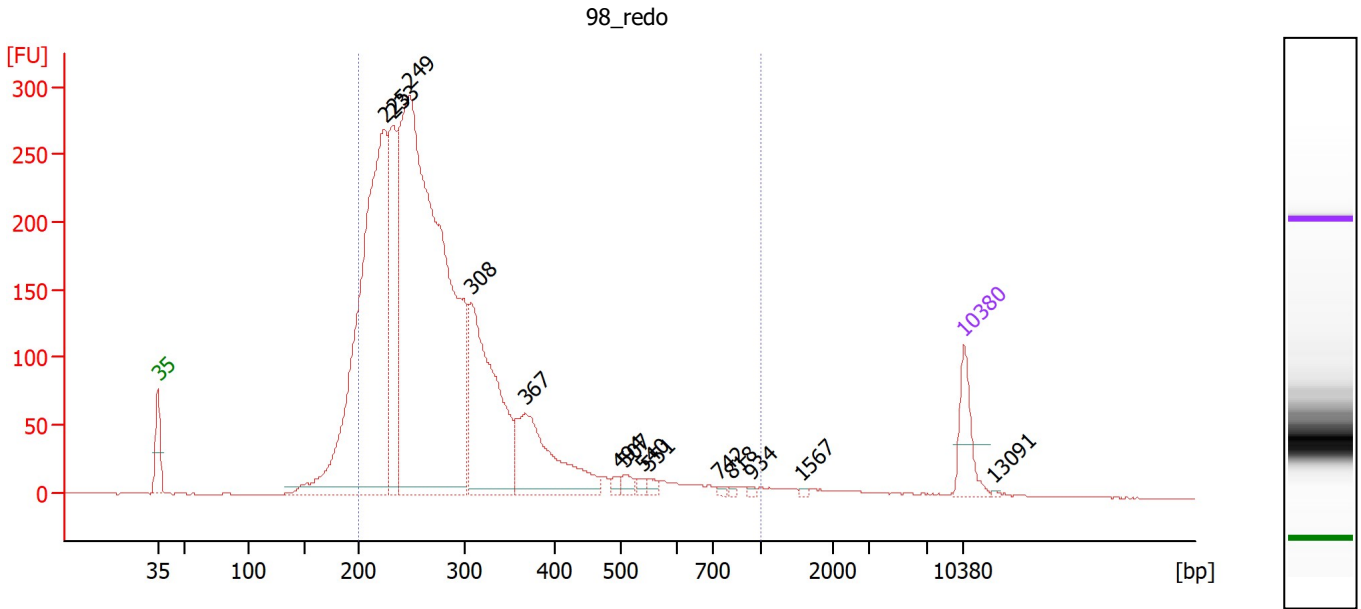
93

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	3,766.5	81	323	46.1	3,529.85	19,642.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 98_redo

Number of peaks found: 14 Corr. Area 1: 4,100.8
 Noise: 0.3

Peak table for sample 11 : 98_redo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	225	1,392.37	9,378.0	
3	233	395.17	2,571.7	
4	249	2,181.26	13,296.5	
5	308	560.84	2,761.8	
6	367	314.46	1,298.2	
7	494	11.75	36.0	
8	507	18.64	55.7	
9	540	10.98	30.8	
10	551	12.95	35.6	
11	742	5.76	11.8	
12	818	4.25	7.9	
13	934	4.42	7.2	
14	1,567	3.44	3.3	
15	10,380	75.00	10.9	Upper Marker
16	13,091	0.00	0.0	

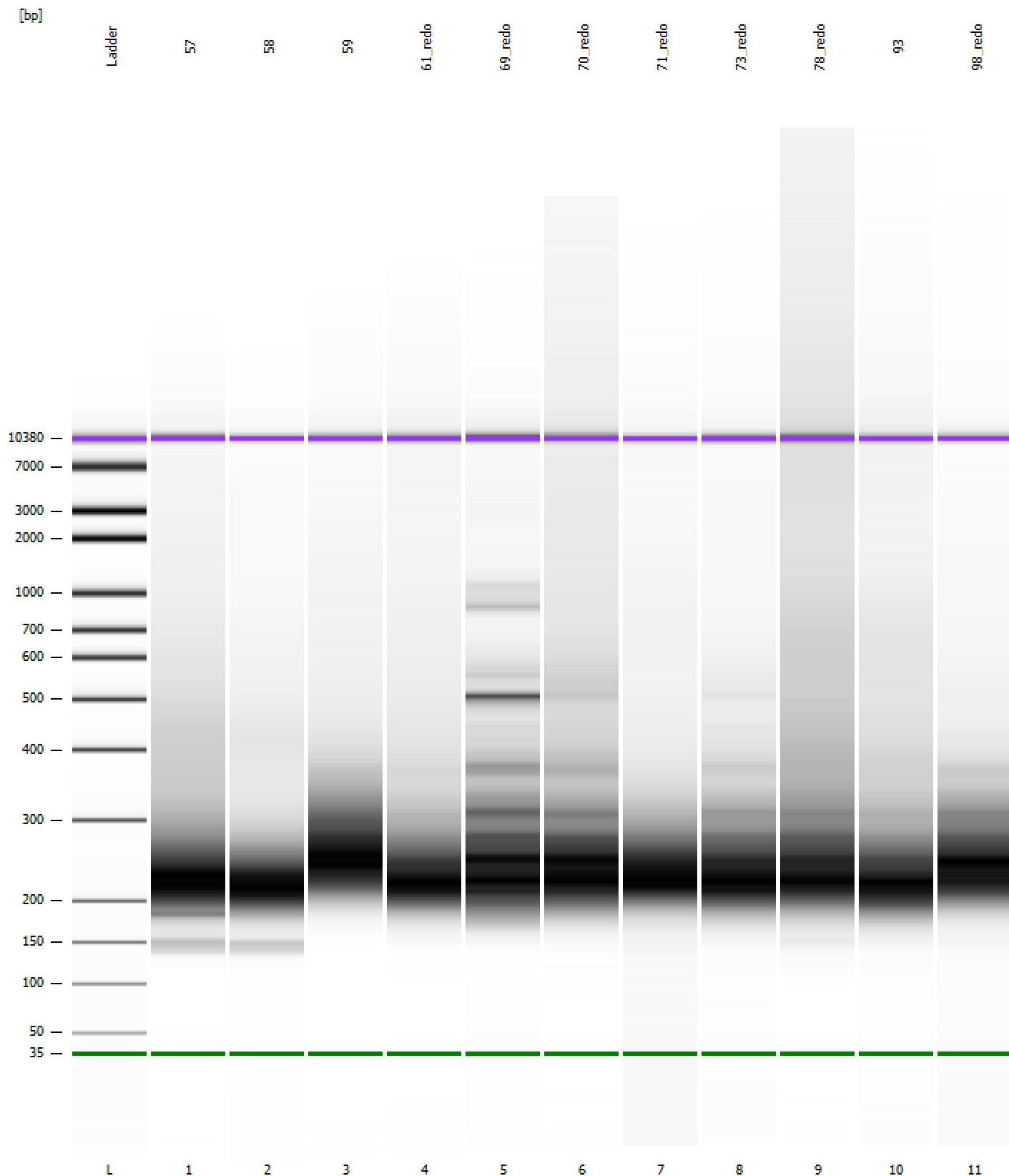
Region table for sample 11 : 98_redo

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	4,100.8	91	289	32.8	4,554.53	25,824.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
Modified: 11/22/2019 1:56:02 PM

Gel Image

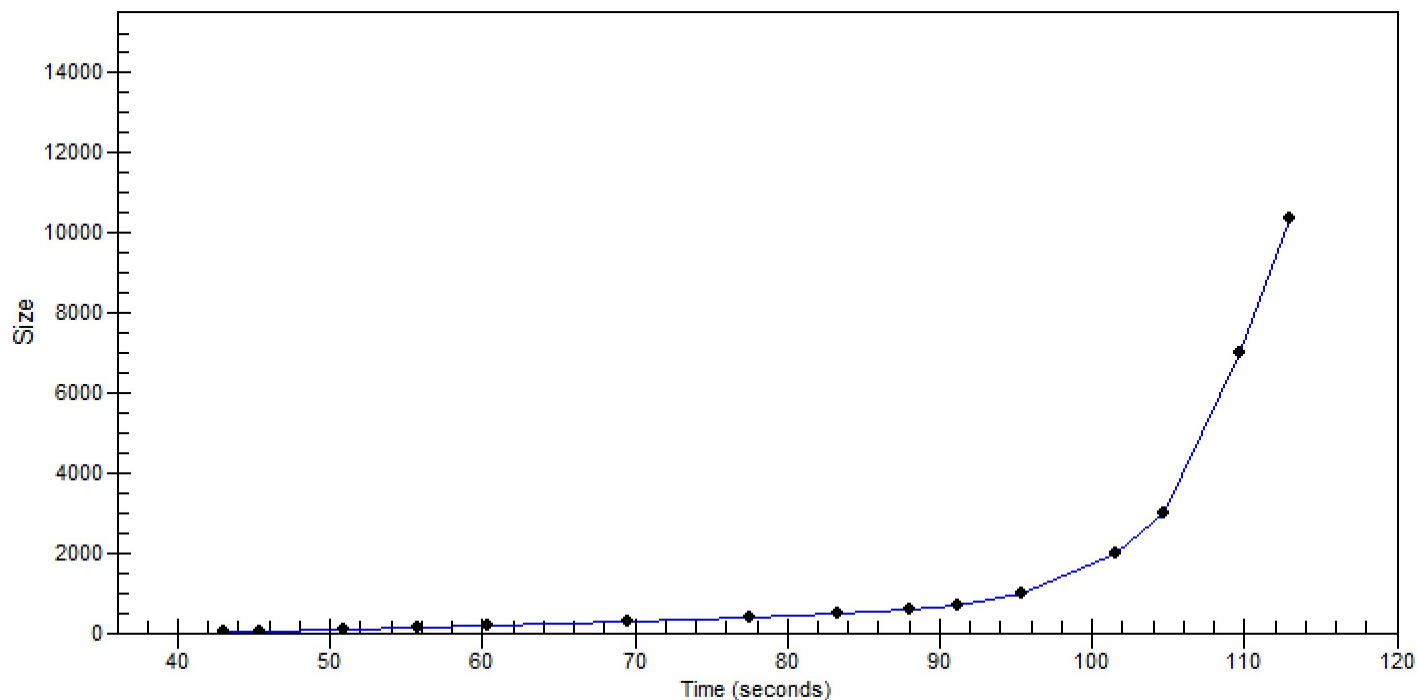


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
Modified: 11/22/2019 1:56:02 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-11-22_001.xad

Created: 11/22/2019 1:14:41 PM
 Modified: 11/22/2019 1:56:02 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		11/22/2019 1:55:59 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2019-11-22\Bioanalyze r1_High Sensitivity DNA Assay_2019-11-22_001.xad)		Instrument	Run		11/22/2019 1:14:46 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		11/22/2019 1:14:46 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		11/22/2019 1:14:46 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		11/22/2019 1:14:46 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		11/22/2019 1:14:46 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		11/22/2019 1:14:46 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		11/22/2019 1:14:46 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB