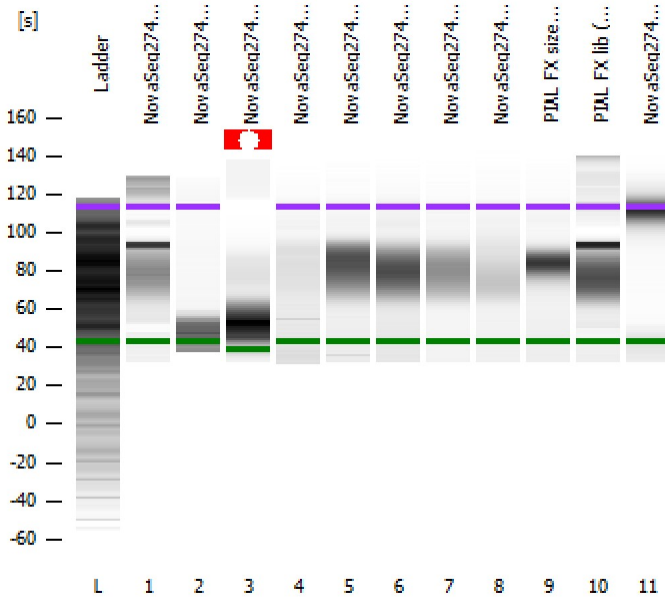


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
Modified: 10/26/2020 4:05:46 PM

Electrophoresis File Run Summary



Instrument Information:

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

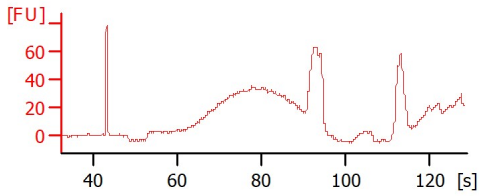
Assay Information:

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

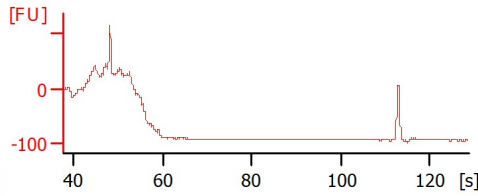
Chip Information:

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

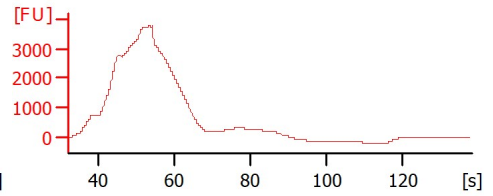
NovaSeq274 - 7 (1:10)



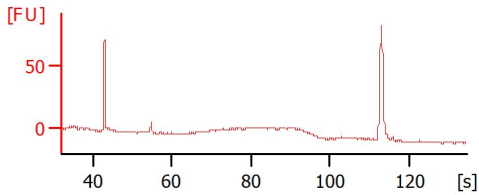
NovaSeq274 - 8 (1:10)



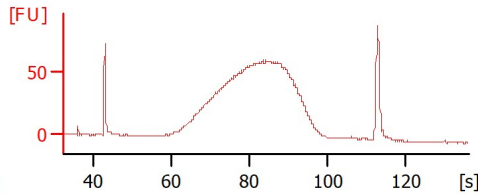
NovaSeq274 - 9



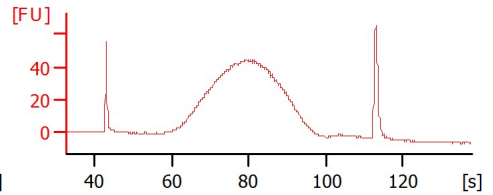
NovaSeq274 - 10 (1:20)



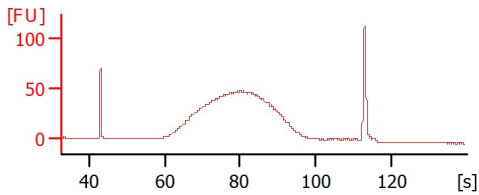
NovaSeq274 - 11 (1:10)



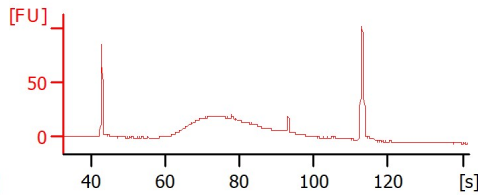
NovaSeq274 - 12 (1:10)



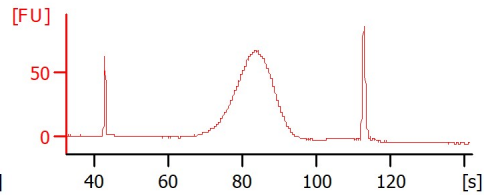
NovaSeq274 - 13 (1:10)



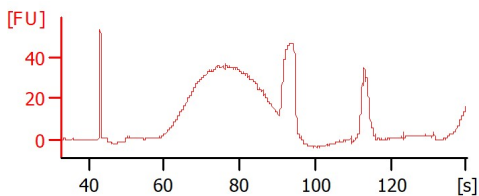
NovaSeq274 - 14 (1:10)



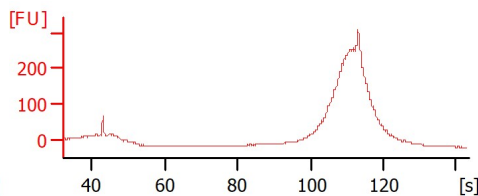
PIAL FX size sel lib



PIAL FX lib (1:7)



NovaSeq274-4 gDNA



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NovaSeq274 - 7 (1:10)		<input type="checkbox"/>	✓			
NovaSeq274 - 8 (1:10)		<input type="checkbox"/>	✓			
NovaSeq274 - 9		<input type="checkbox"/>	✓			
NovaSeq274 - 10 (1:20)		<input type="checkbox"/>	✓			
NovaSeq274 - 11 (1:10)		<input type="checkbox"/>	✓			
NovaSeq274 - 12 (1:10)		<input type="checkbox"/>	✓			
NovaSeq274 - 13 (1:10)		<input type="checkbox"/>	✓			
NovaSeq274 - 14 (1:10)	lib repeat of #4	<input type="checkbox"/>	✓			
PIAL FX size sel lib		<input type="checkbox"/>	✓			
PIAL FX lib (1:7)		<input type="checkbox"/>	✓			
NovaSeq274-4 gDNA		<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_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 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

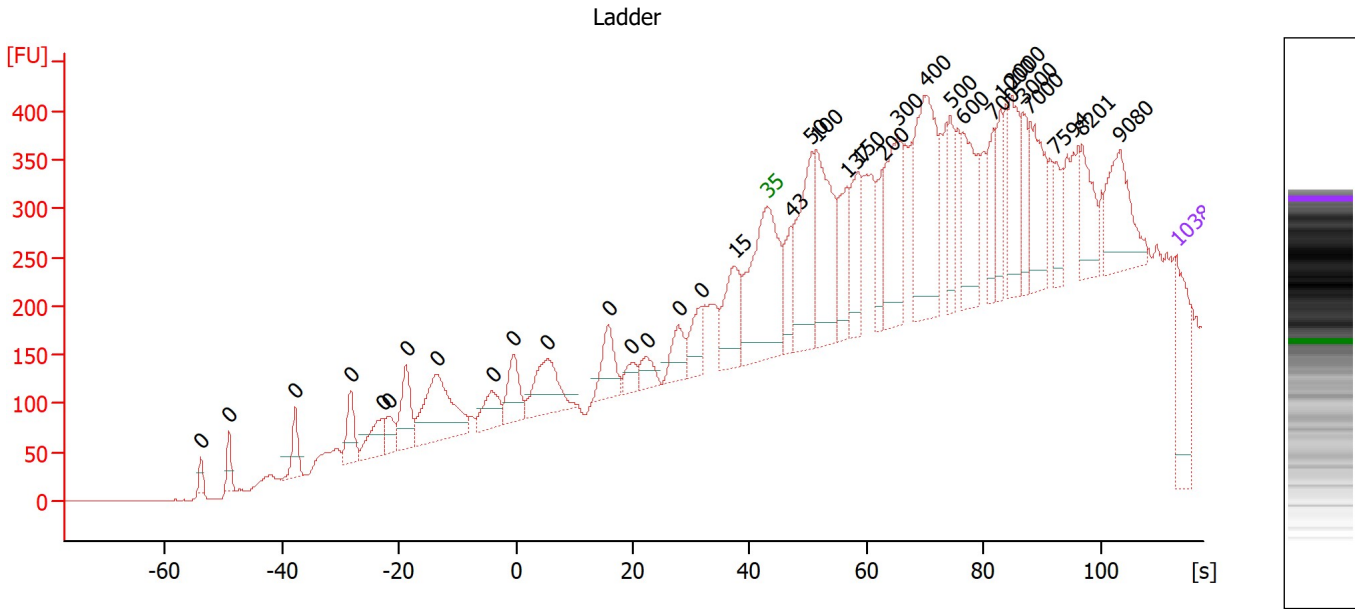
Ladder

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_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4








Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	0	0.00	0.0	
3	0	0.00	0.0	
4	0	0.00	0.0	
5	0	0.00	0.0	
6	0	0.00	0.0	
7	0	0.00	0.0	
8	0	0.00	0.0	
9	0	0.00	0.0	
10	0	0.00	0.0	
11	0	0.00	0.0	
12	0	0.00	0.0	
13	0	0.00	0.0	
14	0	0.00	0.0	
15	0	0.00	0.0	
16	0	0.00	0.0	
17	15	0.00	0.0	
18	35	125.00	5,411.3	Lower Marker
19	43	0.00	0.0	
20	50	150.00	4,545.5	Ladder Peak
21	100	150.00	2,272.7	Ladder Peak
22	137	0.00	0.0	
23	150	150.00	1,515.2	Ladder Peak
24	200	150.00	1,136.4	Ladder Peak
25	300	150.00	757.6	Ladder Peak
26	400	150.00	568.2	Ladder Peak
27	500	150.00	454.5	Ladder Peak

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
Modified: 10/26/2020 4:05:46 PM

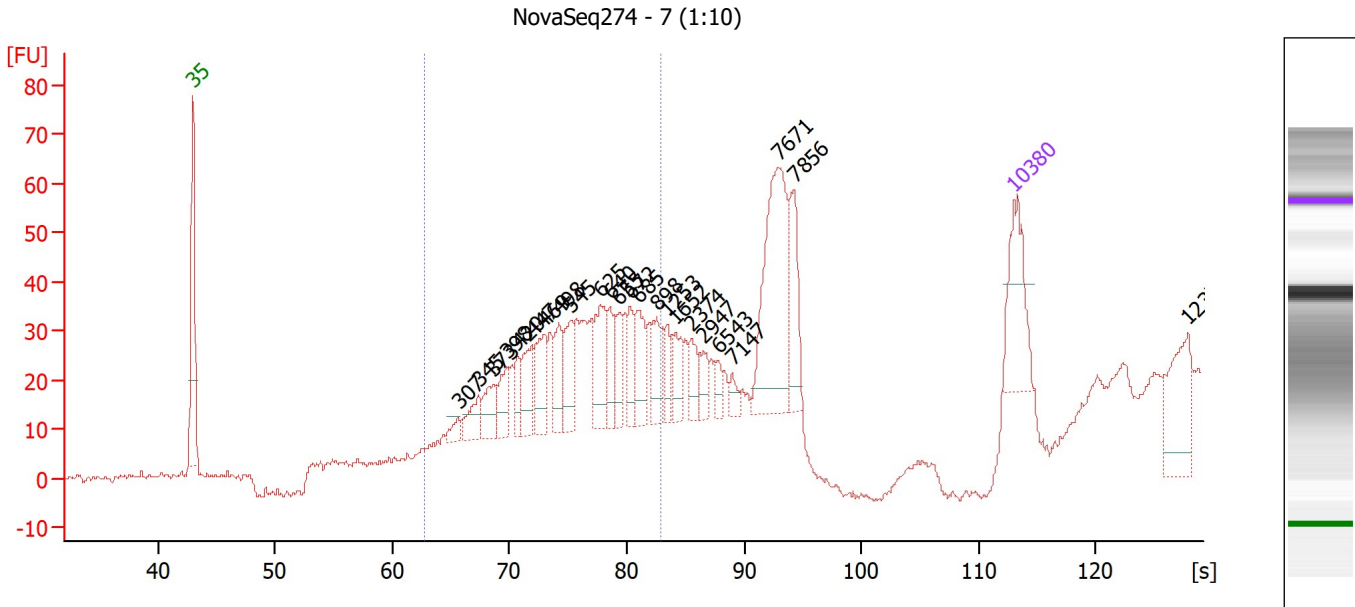
Electropherogram Summary Continued ...**... Peak table for Ladder**

Peak		Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
28		600	150.00	378.8	Ladder Peak
29		700	150.00	324.7	Ladder Peak
30		1,000	150.00	227.3	Ladder Peak
31		2,000	150.00	113.6	Ladder Peak
32		3,000	150.00	75.8	Ladder Peak
33		7,000	150.00	32.5	Ladder Peak
34		7,594	0.00	0.0	
35		8,201	0.00	0.0	
36		9,080	0.00	0.0	
37		10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NovaSeq274 - 7 (1:10)

Number of peaks found: 24 Corr. Area 1: 432.8
 Noise: 0.7

Peak table for sample 1 : NovaSeq274 - 7 (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	307	15.55	76.8	
3	345	35.11	154.1	
4	373	36.76	149.5	
5	398	38.12	145.1	
6	420	26.02	93.8	
7	447	47.48	161.0	
8	469	62.16	200.7	
9	498	46.09	140.3	
10	545	49.87	138.6	
11	625	69.05	167.5	
12	640	32.89	77.8	
13	655	36.54	84.6	
14	672	32.02	72.2	
15	685	51.36	113.7	
16	898	46.35	78.2	
17	1,253	23.05	27.9	
18	1,652	29.93	27.5	
19	2,374	22.73	14.5	
20	2,947	19.27	9.9	
21	6,543	12.03	2.8	
22	7,147	10.53	2.2	
23	7,671	175.81	34.7	
24	7,856	60.27	11.6	
25	10,380	75.00	10.9	Upper Marker
26	12,379	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...

... Region table for sample 1 :

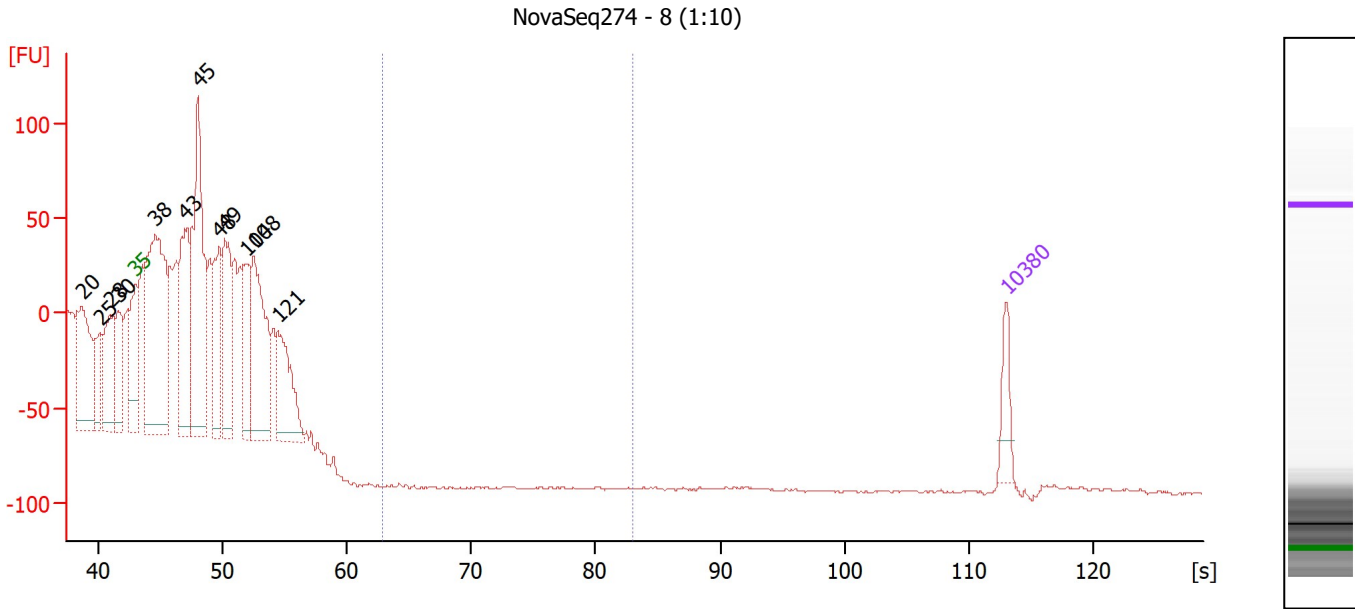
NovaSeq274 - 7 (1:10)

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	432.8	60	561	24.7	796.69	2,354.5	■

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : NovaSeq274 - 8 (1:10)

Number of peaks found: 12 Corr. Area 1: 0.0
 Noise: 0.7

Peak table for sample 2 : NovaSeq274 - 8 (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	20	0.00	0.0	
2	25	0.00	0.0	
3	28	0.00	0.0	
4	30	0.00	0.0	
5	35	125.00	5,411.3	Lower Marker
6	38	1,324.41	52,505.7	
7	43	629.47	22,200.1	
8	45	1,080.74	36,462.2	
9	48	408.76	12,823.5	
10	49	467.35	14,408.7	
11	104	325.33	4,735.1	
12	108	695.32	9,732.1	
13	121	384.42	4,801.7	
14	10,380	75.00	10.9	Upper Marker

Region table for sample 2 : NovaSeq274 - 8 (1:10)

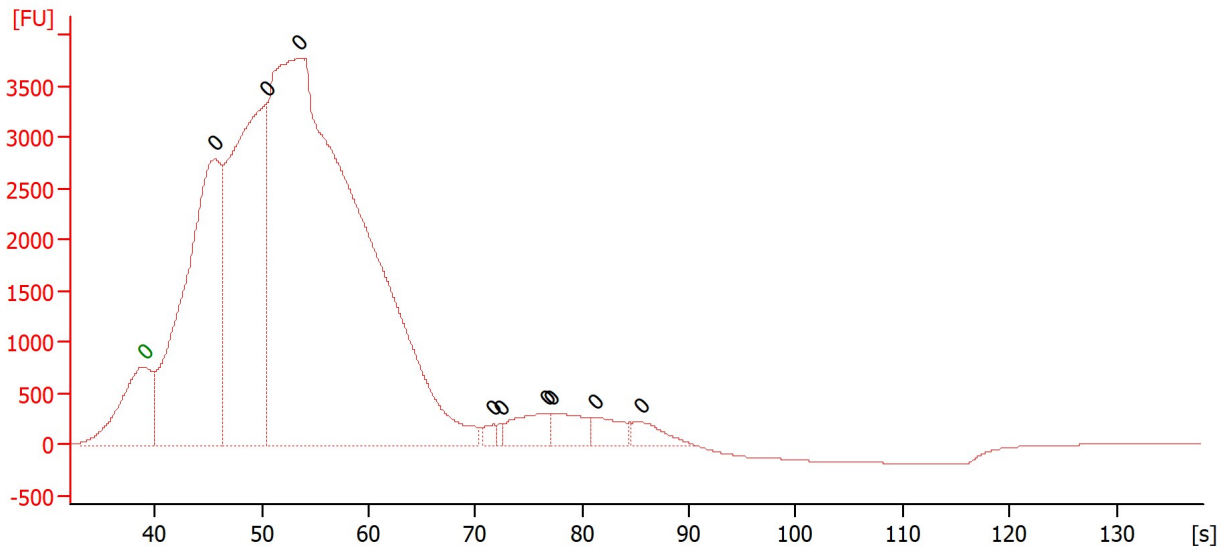
From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	0.0	0	0	0.0	0.00	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...

NovaSeq274 - 9



Overall Results for sample 3 : NovaSeq274 - 9

Number of peaks found: 9 Noise: 0.9

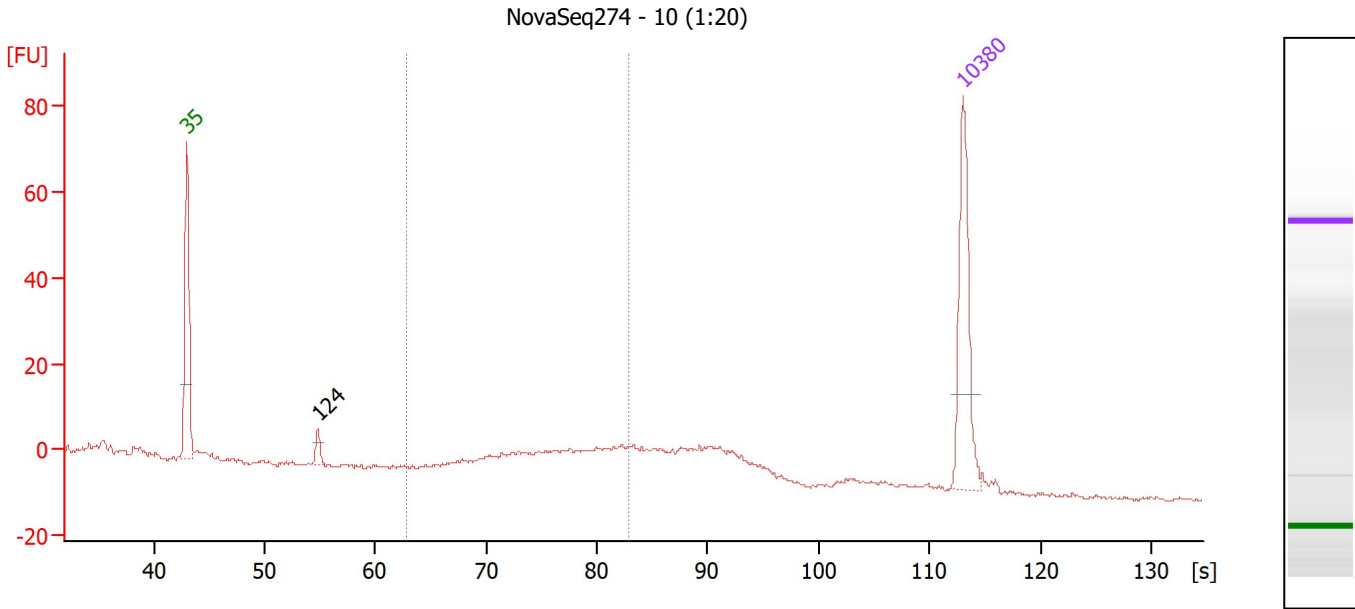
Peak table for sample 3 : NovaSeq274 - 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	Lower Marker
2	0	0.00	0.0	
3	0	0.00	0.0	
4	0	0.00	0.0	
5	0	0.00	0.0	
6	0	0.00	0.0	
7	0	0.00	0.0	
8	0	0.00	0.0	
9	0	0.00	0.0	
10	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : NovaSeq274 - 10 (1:20)

Number of peaks found: 1 Corr. Area 1: 92.6
 Noise: 0.4

Peak table for sample 4 : NovaSeq274 - 10 (1:20)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	124	12.63	154.5	
3	10,380	75.00	10.9	Upper Marker

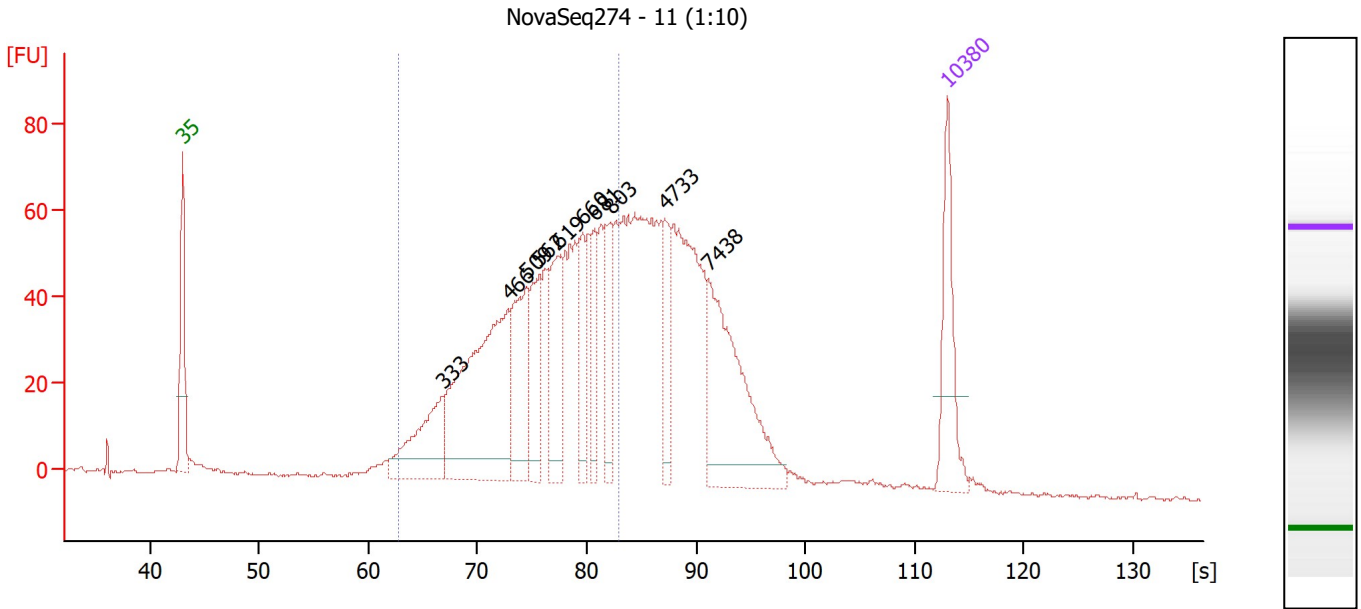
Region table for sample 4 : NovaSeq274 - 10 (1:20)

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	92.6	42	586	24.1	111.89	314.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NovaSeq274 - 11 (1:10)

Number of peaks found: 10 Corr. Area 1: 1,009.0
 Noise: 0.4

Peak table for sample 5 : NovaSeq274 - 11 (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	333	115.37	525.5	
3	466	306.80	997.8	
4	509	120.17	357.9	
5	562	69.93	188.5	
6	619	92.24	225.7	
7	660	60.90	139.8	
8	681	53.61	119.3	
9	803	68.54	129.2	
10	4,733	41.35	13.2	
11	7,438	178.36	36.3	
12	10,380	75.00	10.9	Upper Marker

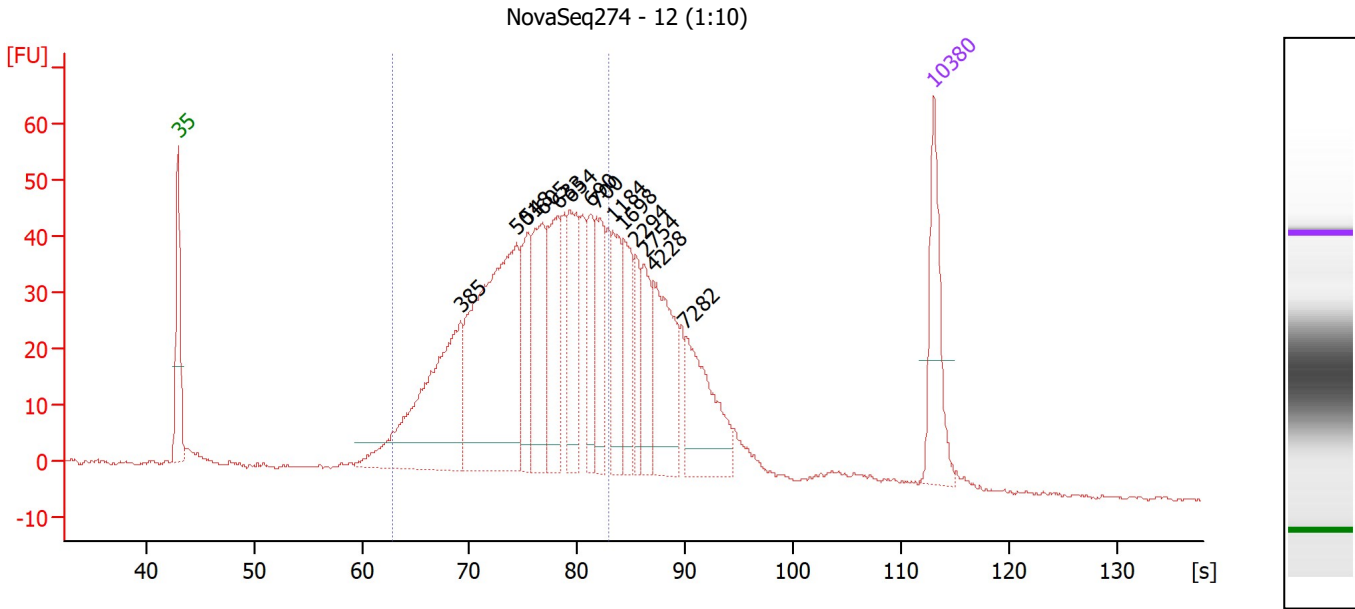
Region table for sample 5 : NovaSeq274 - 11 (1:10)

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	1,009.0	55	561	27.3	1,210.36	3,694.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NovaSeq274 - 12 (1:10)

Number of peaks found: 14 Corr. Area 1: 896.9
 Noise: 0.3

Peak table for sample 6 : NovaSeq274 - 12 (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	385	264.72	1,040.6	
3	501	373.96	1,131.3	
4	548	80.85	223.6	
5	605	107.57	269.2	
6	633	105.74	253.3	
7	654	95.97	222.3	
8	690	61.45	135.0	
9	700	80.41	174.1	
10	1,184	63.97	81.9	
11	1,698	59.68	53.2	
12	2,294	33.04	21.8	
13	2,754	45.26	24.9	
14	4,228	102.16	36.6	
15	7,282	95.57	19.9	
16	10,380	75.00	10.9	Upper Marker

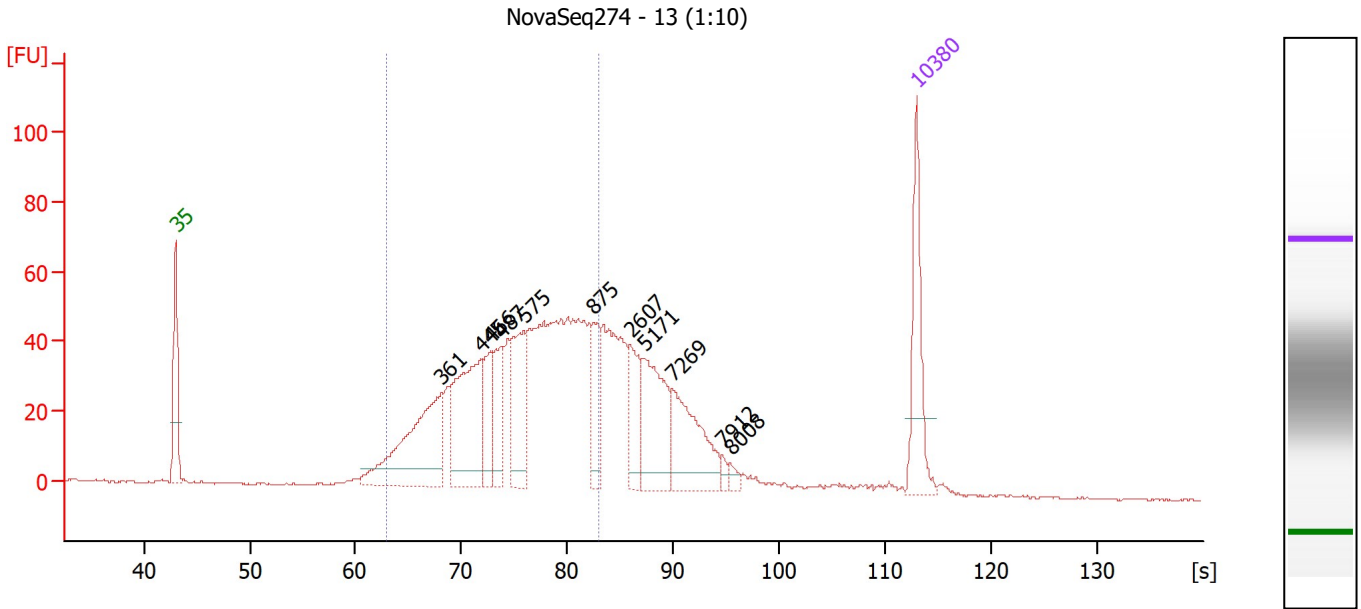
Region table for sample 6 : NovaSeq274 - 12 (1:10)

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	896.9	66	548	27.5	1,348.20	4,213.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NovaSeq274 - 13 (1:10)

Number of peaks found: 11 Corr. Area 1: 950.4
 Noise: 0.3

Peak table for sample 7 : NovaSeq274 - 13 (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	361	192.20	807.2	
3	445	165.74	564.0	
4	466	56.70	184.5	
5	487	58.57	182.2	
6	575	93.91	247.2	
7	875	51.67	89.5	
8	2,607	49.36	28.7	
9	5,171	95.09	27.9	
10	7,269	90.41	18.8	
11	7,912	6.17	1.2	
12	8,008	7.34	1.4	
13	10,380	75.00	10.9	Upper Marker

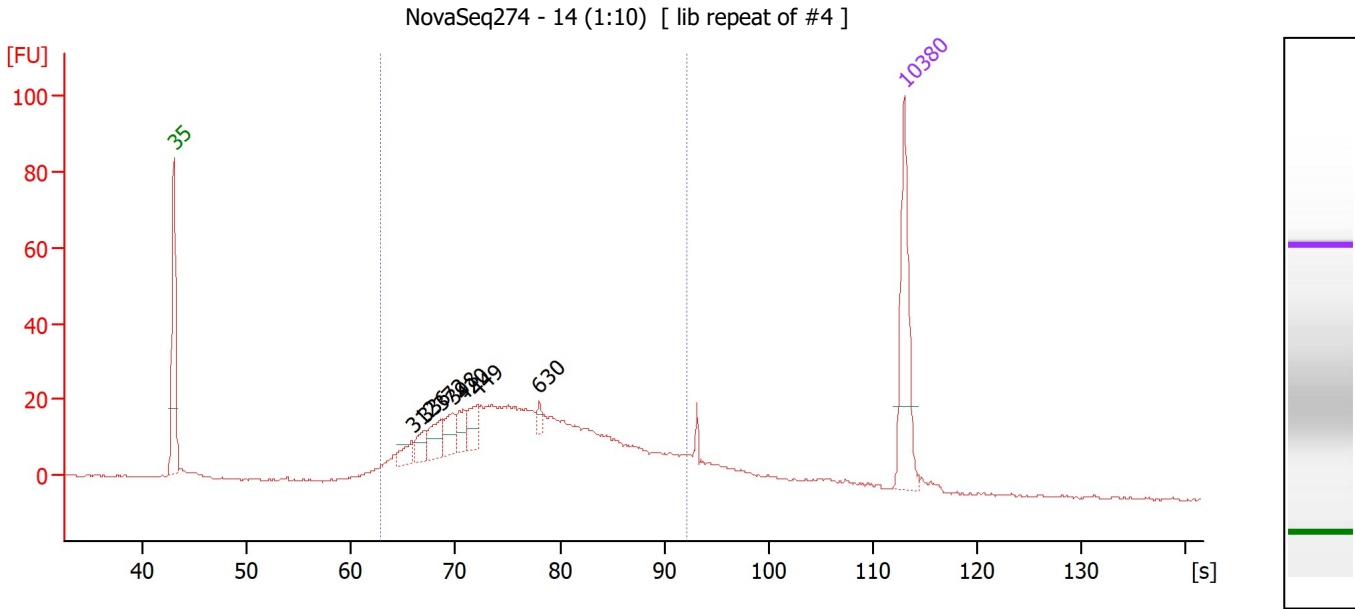
Region table for sample 7 : NovaSeq274 - 13 (1:10)

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	950.4	65	544	28.3	1,105.62	3,503.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NovaSeq274 - 14 (1:10)

Number of peaks found: 7 Corr. Area 1: 554.3
 Noise: 0.3

Peak table for sample 8 : NovaSeq274 - 14 (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	312	15.56	75.6	
3	336	16.56	74.7	
4	372	26.21	106.6	
5	398	22.55	85.9	
6	420	18.76	67.6	
7	449	21.87	73.8	
8	630	6.84	16.4	
9	10,380	75.00	10.9	Upper Marker

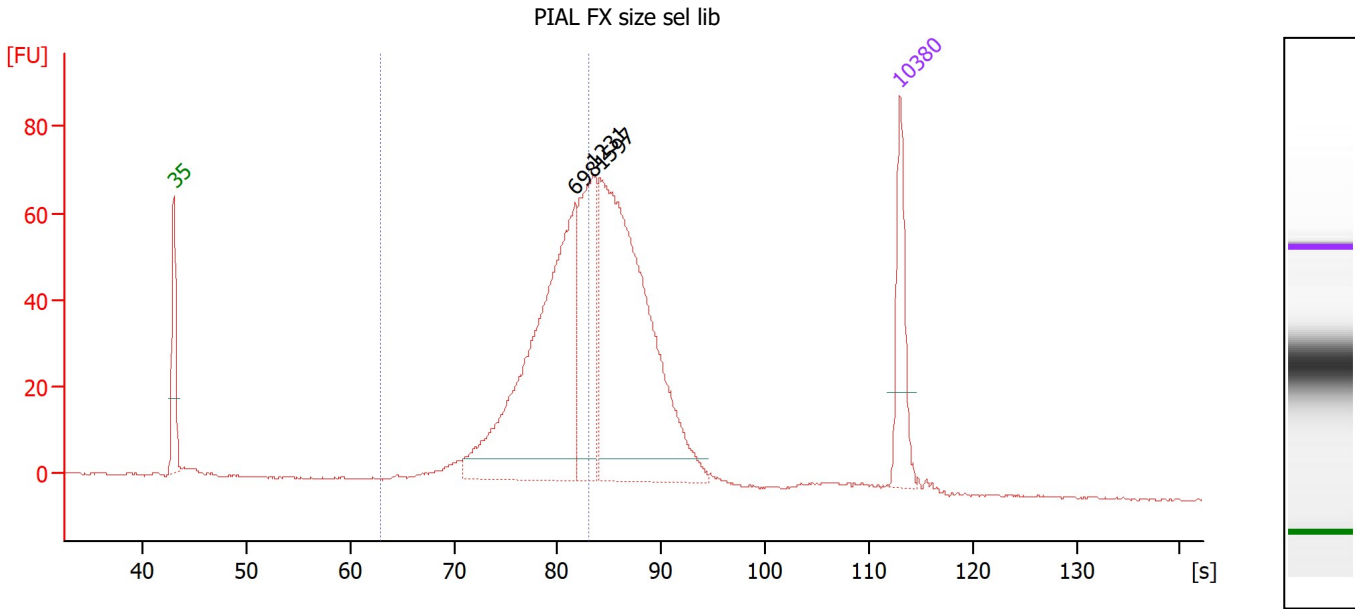
Region table for sample 8 : NovaSeq274 - 14 (1:10)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	7,565	554.3	84	1,412	100.0	665.68	1,920.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : PIAL FX size sel lib

Number of peaks found: 3 Corr. Area 1: 513.9
 Noise: 0.2

Peak table for sample 9 : PIAL FX size sel lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	698	478.82	1,038.9	
3	1,231	173.48	213.6	
4	1,597	464.82	441.0	
5	10,380	75.00	10.9	Upper Marker

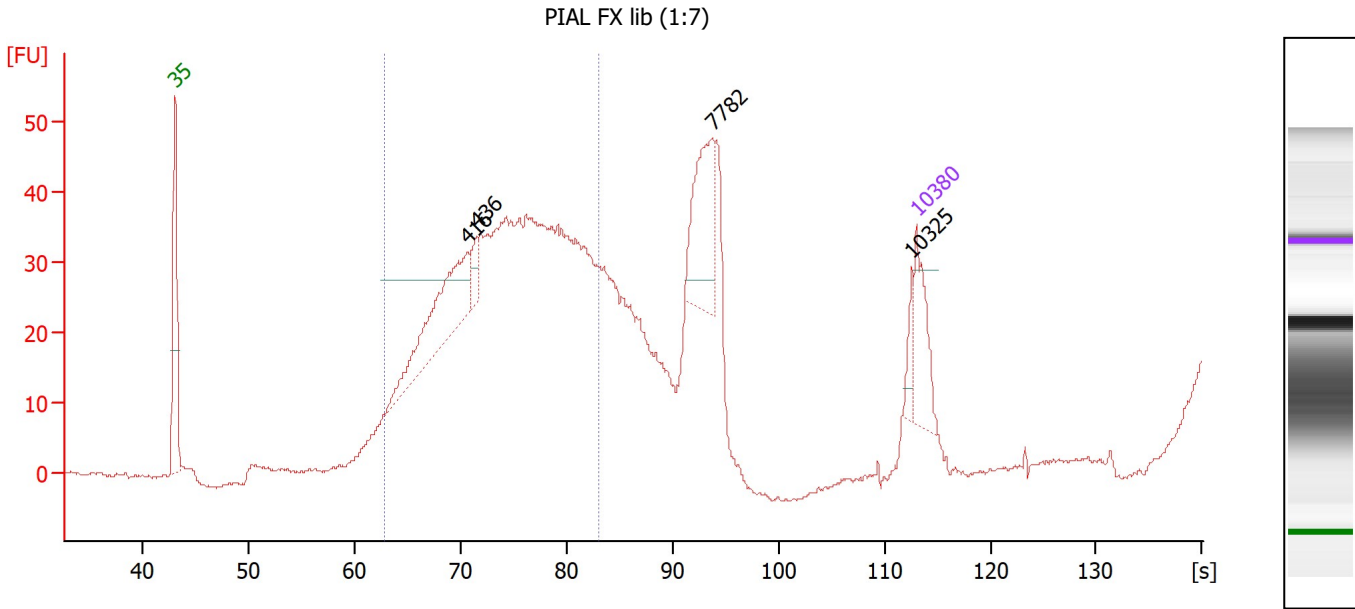
Region table for sample 9 : PIAL FX size sel lib

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	513.9	47	657	19.6	652.18	1,595.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : PIAL FX lib (1:7)

Number of peaks found: 4 Corr. Area 1: 657.1
 Noise: 0.2

Peak table for sample 10 : PIAL FX lib (1:7)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	416	206.58	752.4	
3	436	27.60	95.8	
4	7,782	136.14	26.5	
5	10,325	21.82	3.2	
6	10,380	75.00	10.9	Upper Marker

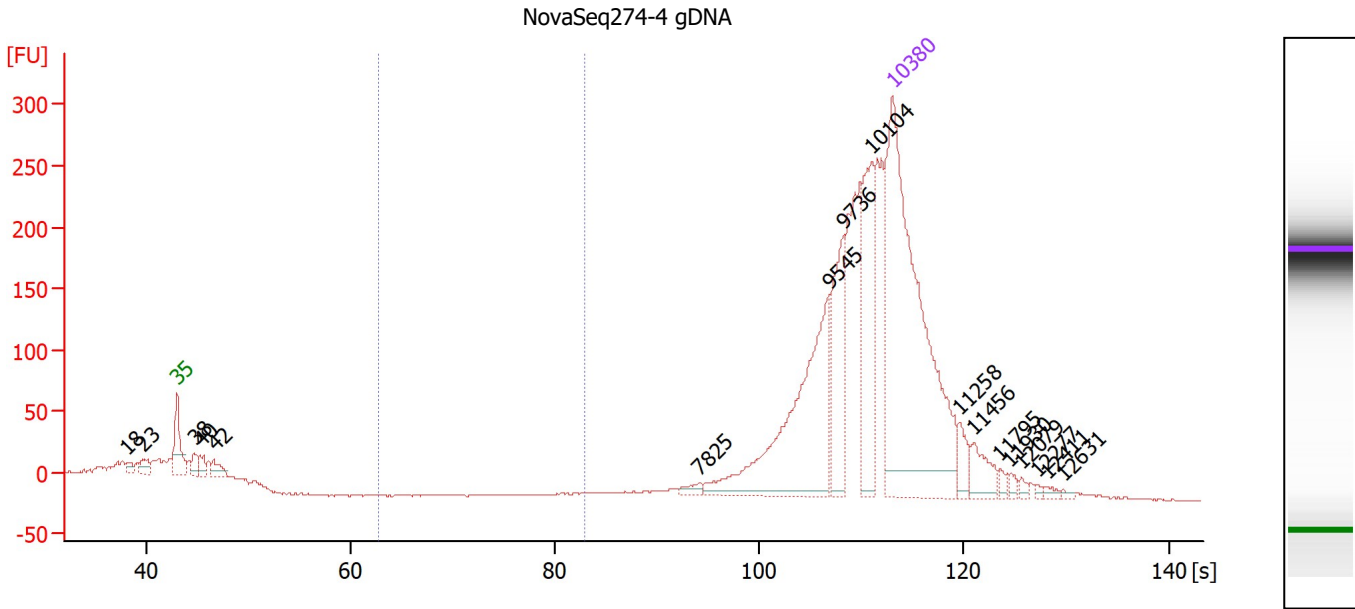
Region table for sample 10 : PIAL FX lib (1:7)

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	657.1	69	524	28.4	2,069.71	6,779.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 11 : NovaSeq274-4 gDNA

Number of peaks found: 17 Corr. Area 1: 0.0
 Noise: 0.6

Peak table for sample 11 : NovaSeq274-4 gDNA

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	18	0.00	0.0	
2	23	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	38	3.82	150.9	
5	40	4.01	153.3	
6	42	4.37	157.2	
7	7,825	1.25	0.2	
8	9,545	43.44	6.9	
9	9,736	17.42	2.7	
10	10,104	21.82	3.3	
11	10,380	75.00	10.9	Upper Marker
12	11,258	0.00	0.0	
13	11,456	0.00	0.0	
14	11,795	0.00	0.0	
15	11,930	0.00	0.0	
16	12,079	0.00	0.0	
17	12,277	0.00	0.0	
18	12,411	0.00	0.0	
19	12,631	0.00	0.0	

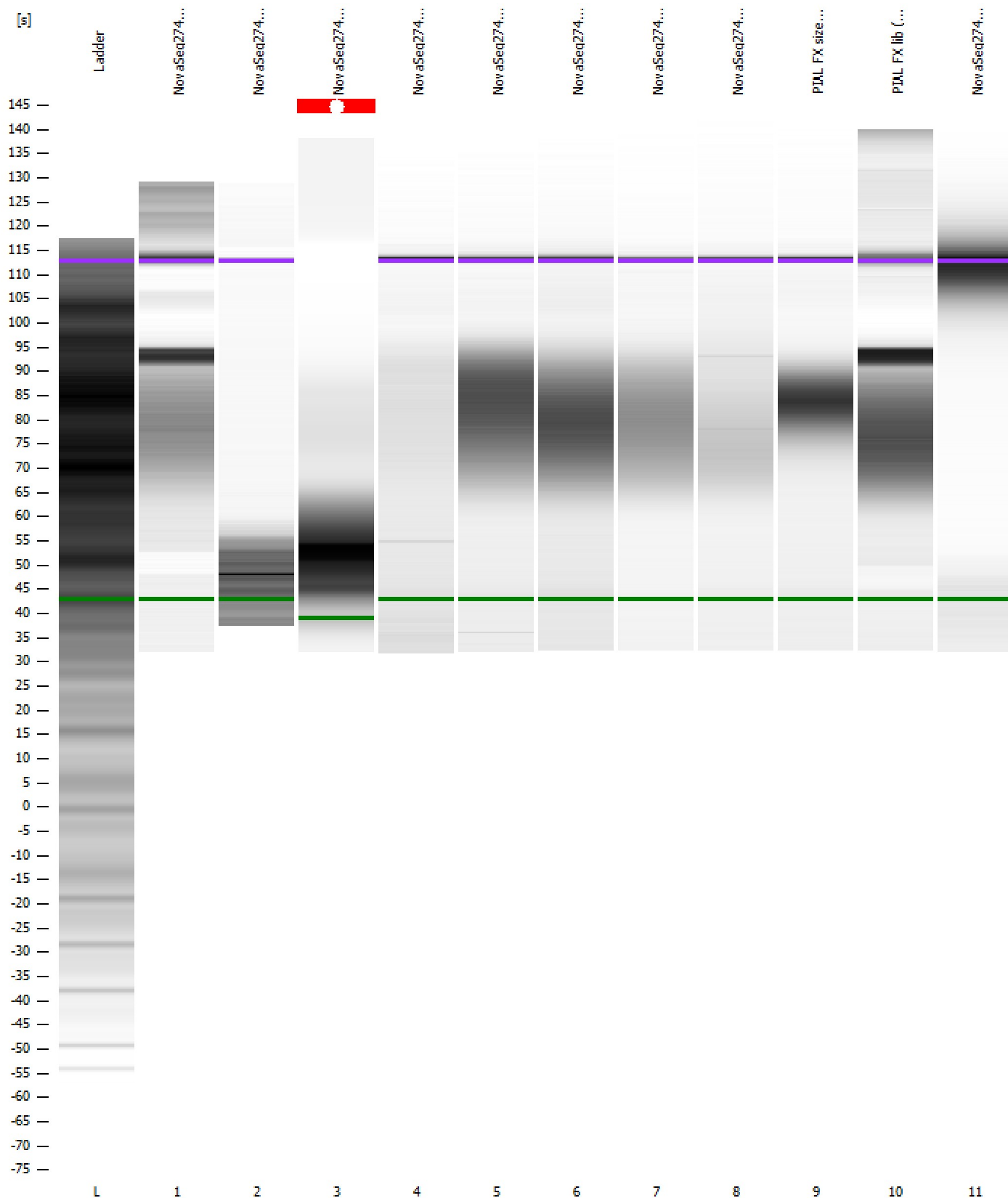
Region table for sample 11 : NovaSeq274-4 gDNA

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	0.0	0	0	0.0	0.00	0.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
Modified: 10/26/2020 4:05:46 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad

Created: 10/26/2020 12:37:44 PM
 Modified: 10/26/2020 4:05:46 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		10/26/2020 1:19:02 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-10-26\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-26_001.xad)		Instrument	Run		10/26/2020 12:37:49 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		10/26/2020 12:37:49 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		10/26/2020 12:37:49 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		10/26/2020 12:37:49 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		10/26/2020 12:37:49 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		10/26/2020 12:37:49 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		10/26/2020 12:37:49 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB