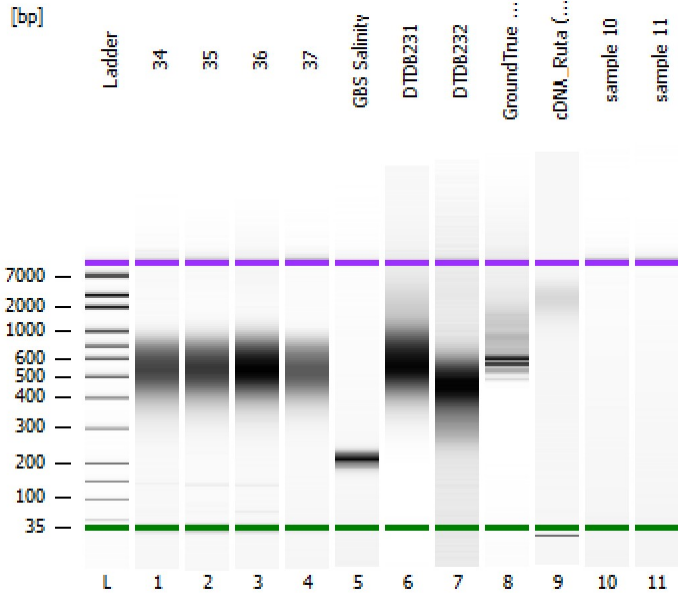


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
Modified: 6/15/2020 3:19:19 PM

Electrophoresis File Run Summary



Instrument Information:

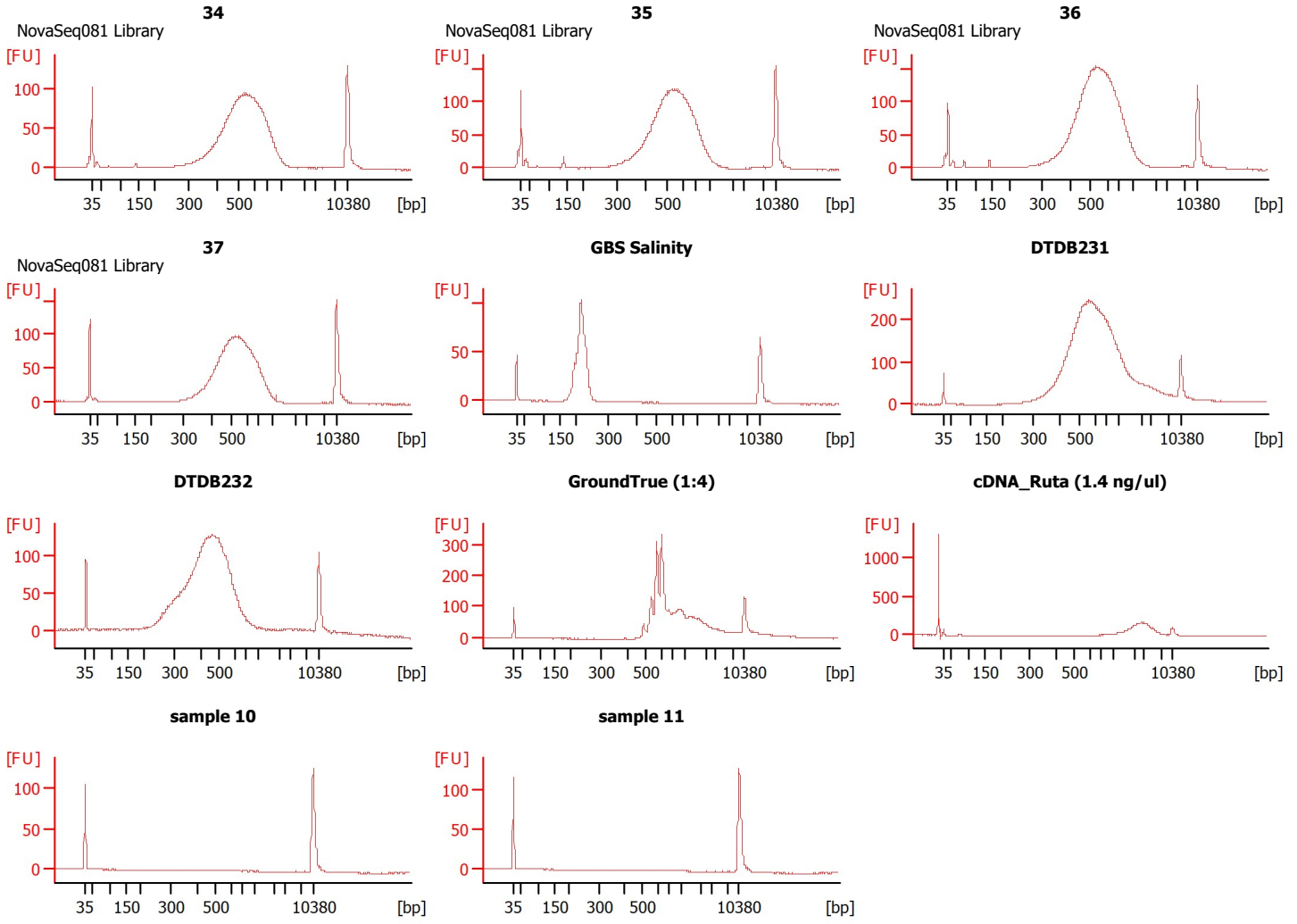
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
34	NovaSeq081 Library	<input type="checkbox"/>	✓			
35	NovaSeq081 Library	<input type="checkbox"/>	✓			
36	NovaSeq081 Library	<input type="checkbox"/>	✓			
37	NovaSeq081 Library	<input type="checkbox"/>	✓			
GBS Salinity		<input type="checkbox"/>	✓			
DTDB231		<input type="checkbox"/>	✓			
DTDB232		<input type="checkbox"/>	✓			
GroundTrue (1:4)		<input type="checkbox"/>	✓			
cDNA_Ruta (1.4 ng/ul)		<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: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 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

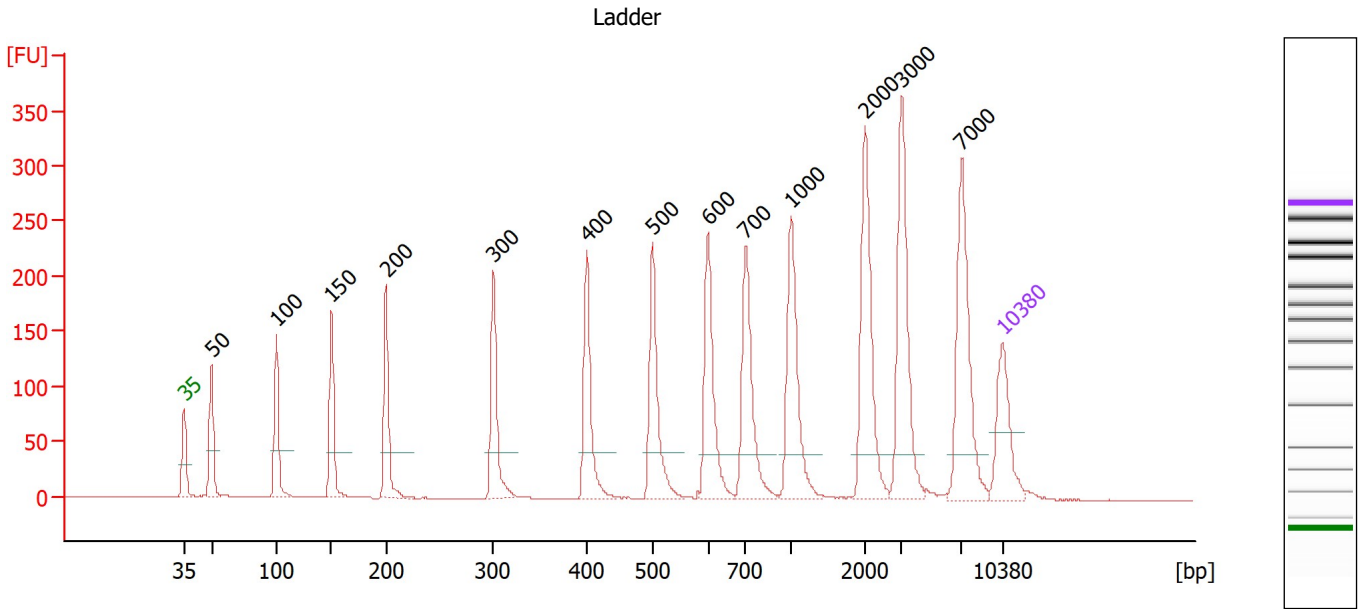
Ladder

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_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

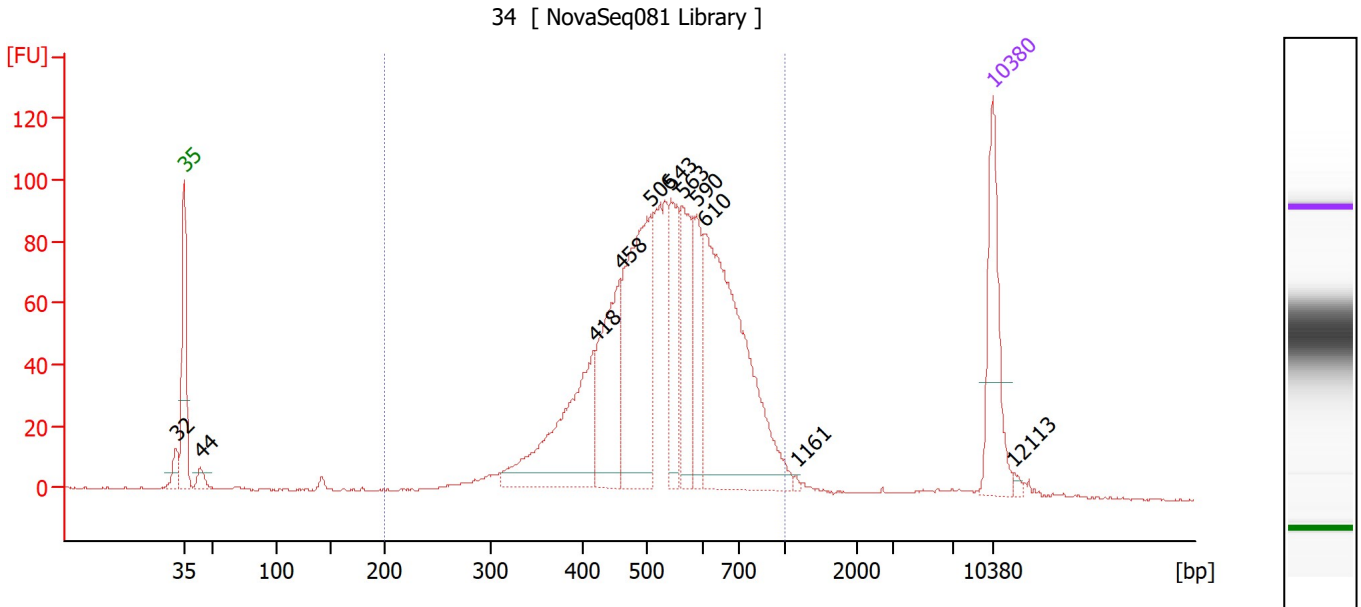
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 34

Number of peaks found: 11 Corr. Area 1: 1,620.5
 Noise: 0.3

Peak table for sample 1 : 34

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	44	14.31	495.6	
4	418	169.40	614.6	
5	458	128.44	425.0	
6	506	227.37	681.2	
7	543	85.09	237.5	
8	563	95.63	257.3	
9	590	63.66	163.4	
10	610	301.94	749.7	
11	1,161	1.75	2.3	
12	10,380	75.00	10.9	Upper Marker
13	12,113	0.00	0.0	

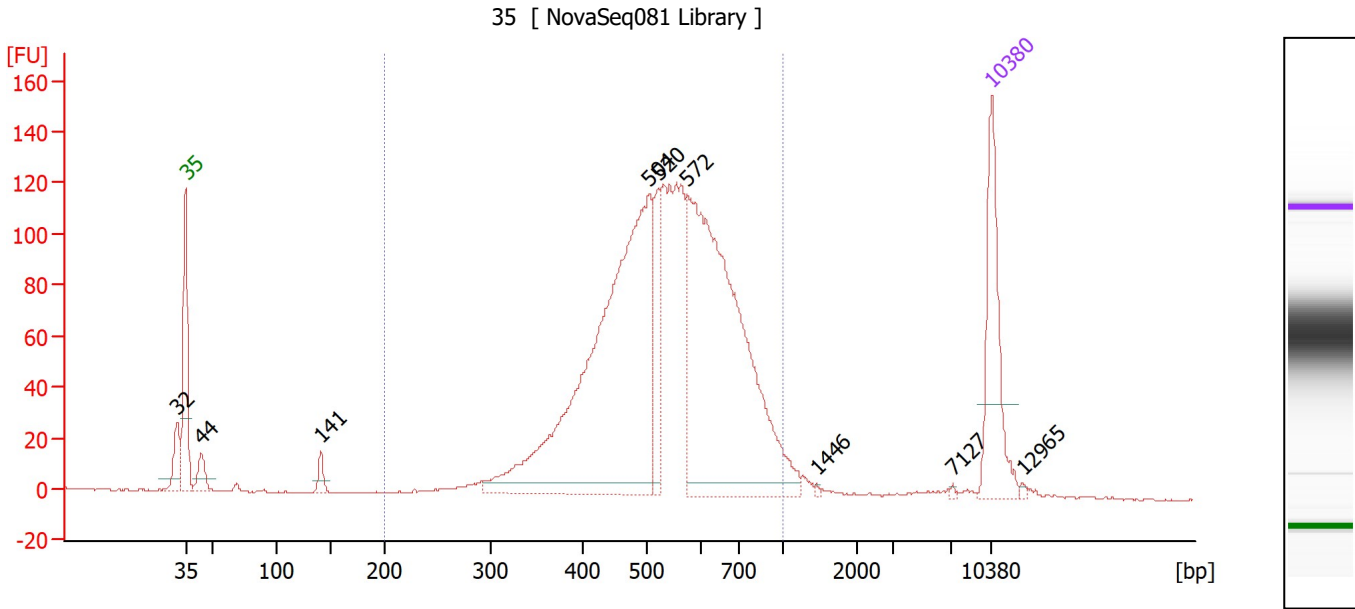
Region table for sample 1 : 34

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	1,620.5	94	544	23.4	1,283.94	3,868.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 35

Number of peaks found: 9 Corr. Area 1: 2,039.6
 Noise: 0.3

Peak table for sample 2 : 35

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	44	24.69	854.4	
4	141	13.28	143.0	
5	504	521.07	1,566.2	
6	520	57.00	166.2	
7	572	437.89	1,159.1	
8	1,446	1.30	1.4	
9	7,127	1.18	0.3	
10	10,380	75.00	10.9	Upper Marker
11	12,965	0.00	0.0	

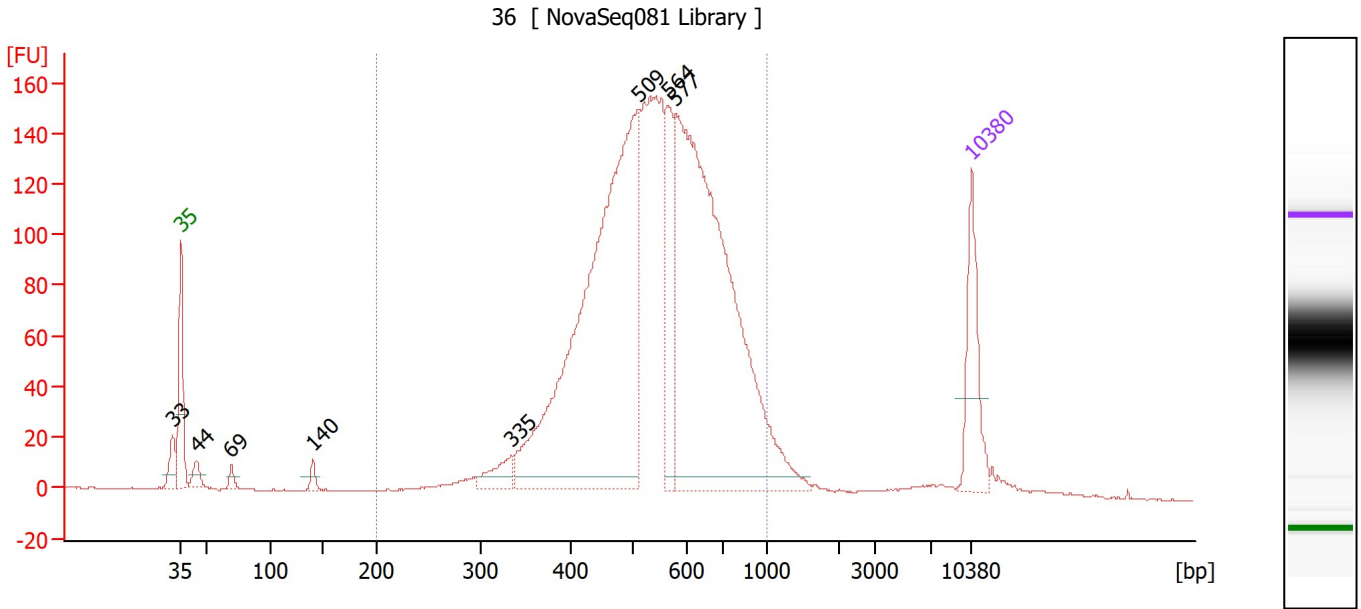
Region table for sample 2 : 35

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	2,039.6	93	548	23.3	1,215.81	3,620.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 36

Number of peaks found: 8 Corr. Area 1: 2,636.6
 Noise: 0.3

Peak table for sample 3 : 36

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	44	23.85	827.8	
4	69	12.76	280.2	
5	140	13.55	146.5	
6	335	36.81	166.6	
7	509	837.01	2,492.8	
8	564	107.75	289.2	
9	577	772.83	2,028.0	
10	10,380	75.00	10.9	Upper Marker

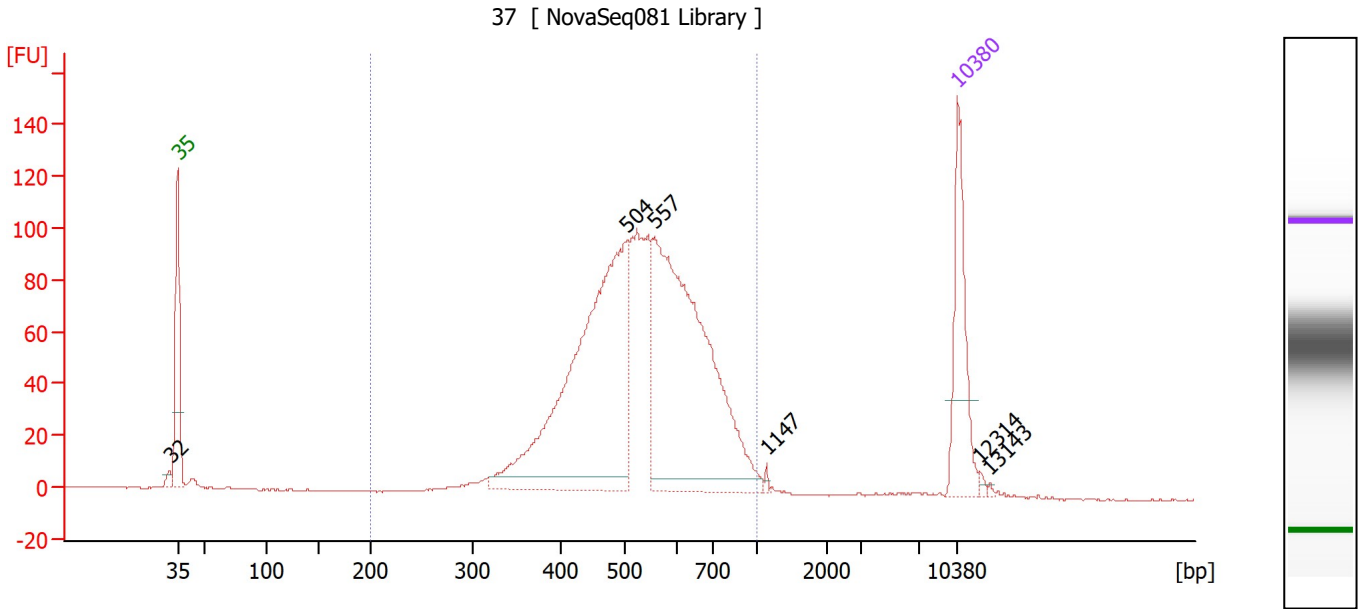
Region table for sample 3 : 36

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	2,636.6	93	554	23.7	2,156.76	6,366.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 37

Number of peaks found: 6 Corr. Area 1: 1,601.8
 Noise: 0.3

Peak table for sample 4 : 37

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	504	445.98	1,340.0	
4	557	420.84	1,145.3	
5	1,147	2.12	2.8	
6	10,380	75.00	10.9	Upper Marker
7	12,314	0.00	0.0	
8	13,143	0.00	0.0	

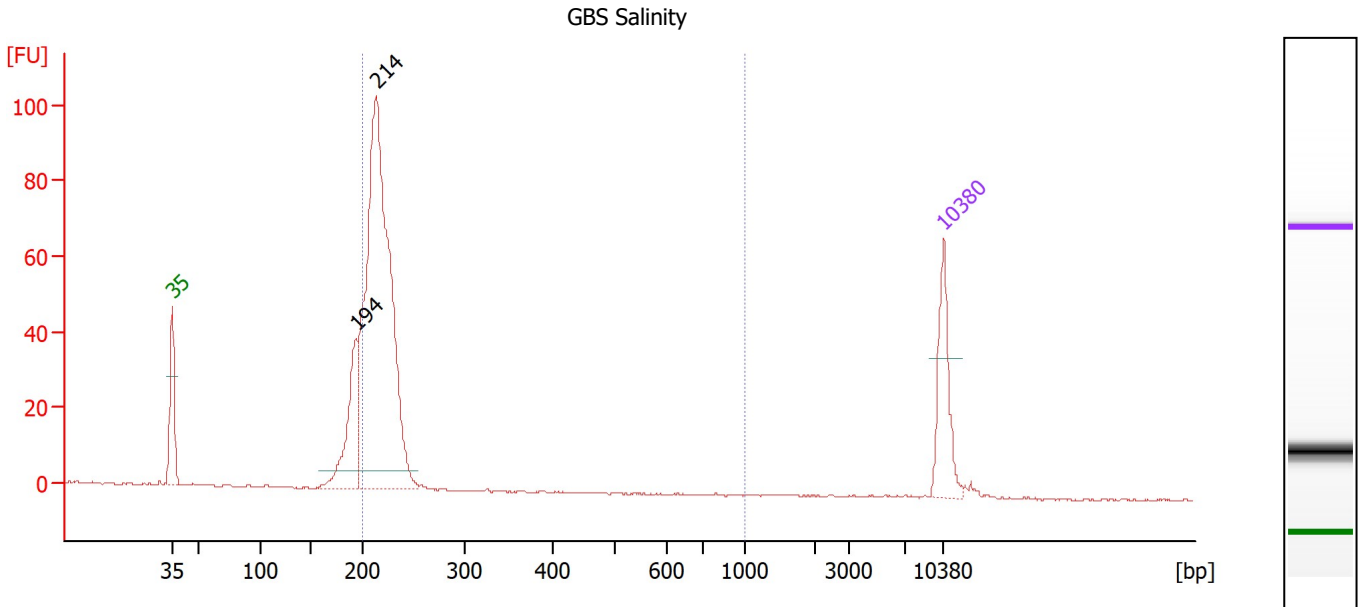
Region table for sample 4 : 37

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	1,601.8	97	543	22.2	1,058.40	3,149.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : GBS Salinity

Number of peaks found: 2 Corr. Area 1: 406.9
 Noise: 0.2

Peak table for sample 5 : GBS Salinity

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	194	145.56	1,139.0	
3	214	851.50	6,042.5	
4	10,380	75.00	10.9	Upper Marker

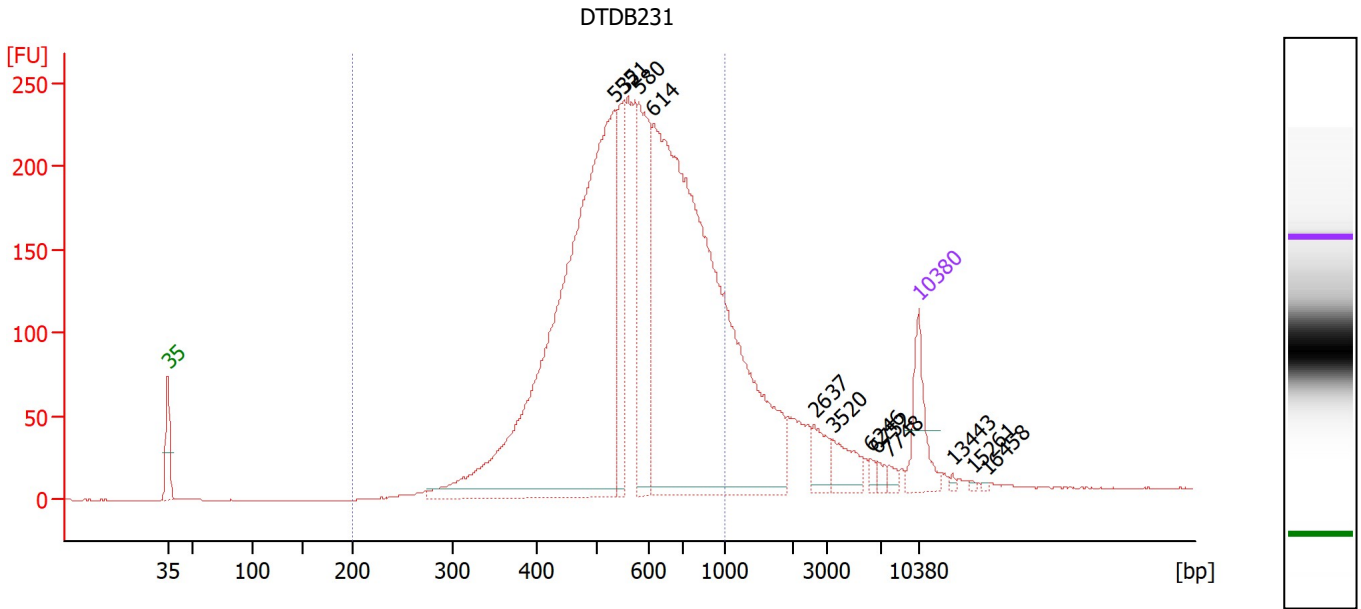
Region table for sample 5 : GBS Salinity

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	406.9	80	218	4.9	781.07	5,438.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : DTDB231

Number of peaks found: 12 Corr. Area 1: 4,032.7
 Noise: 0.2

Peak table for sample 6 : DTDB231

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	532	1,450.76	4,130.2	
3	551	183.44	504.4	
4	580	278.08	725.9	
5	614	1,491.57	3,678.8	
6	2,637	42.32	24.3	
7	3,520	48.46	20.9	
8	6,246	8.94	2.2	
9	6,752	9.37	2.1	
10	7,748	9.91	1.9	
11	10,380	75.00	10.9	Upper Marker
12	13,443	0.00	0.0	
13	15,261	0.00	0.0	
14	16,458	0.00	0.0	

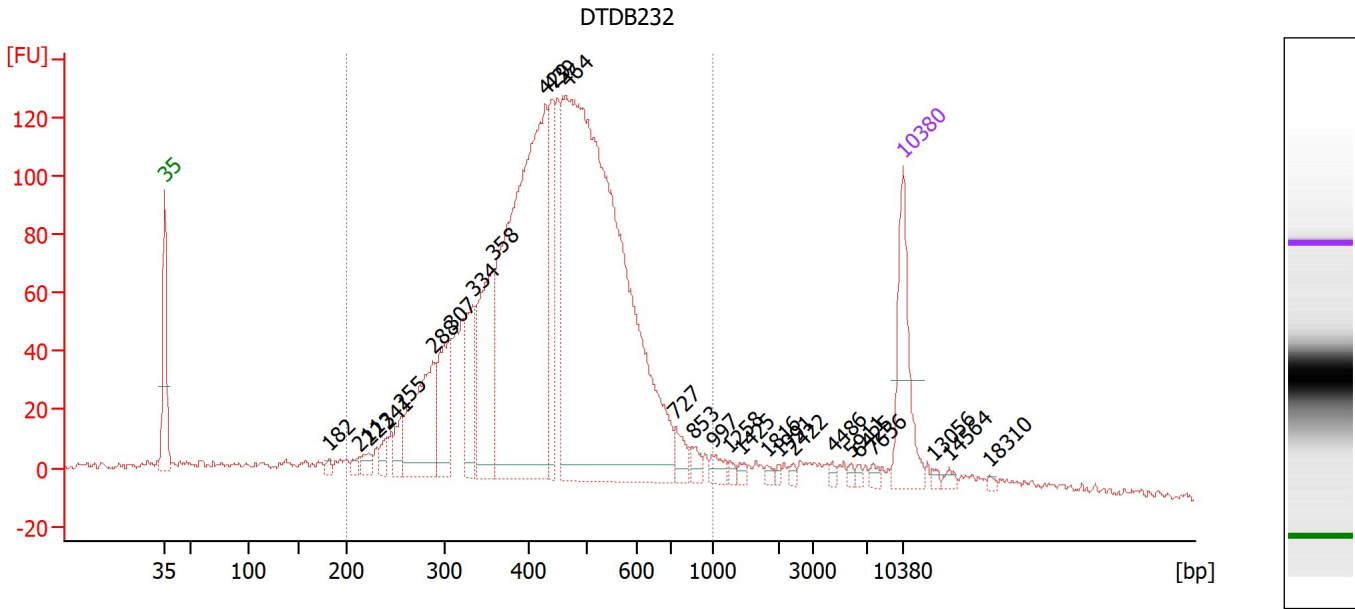
Region table for sample 6 : DTDB231

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	4,032.7	84	586	25.2	3,350.21	9,415.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : DTDB232

Number of peaks found: 27 Corr. Area 1: 2,650.5
 Noise: 1.1

Peak table for sample 7 : DTDB232

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	182	6.03	50.3	
3	211	8.11	58.2	
4	223	14.59	99.3	
5	241	16.52	104.0	
6	255	28.16	167.0	
7	288	143.86	755.9	
8	307	88.89	438.0	
9	334	80.87	366.8	
10	358	147.42	623.7	
11	429	578.31	2,043.8	
12	439	94.63	326.9	
13	464	972.31	3,175.9	
14	727	19.92	41.5	
15	853	11.71	20.8	
16	997	11.90	18.1	
17	1,258	3.96	4.8	
18	1,425	4.53	4.8	
19	1,816	3.94	3.3	
20	1,991	2.73	2.1	
21	2,422	3.58	2.2	
22	4,486	3.14	1.1	
23	5,911	3.11	0.8	
24	6,425	3.18	0.7	
25	7,656	4.63	0.9	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...

... Peak table for sample 7 : DTDB232

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	13,056	0.00	0.0	
28	14,564	0.00	0.0	
29	18,310	0.00	0.0	

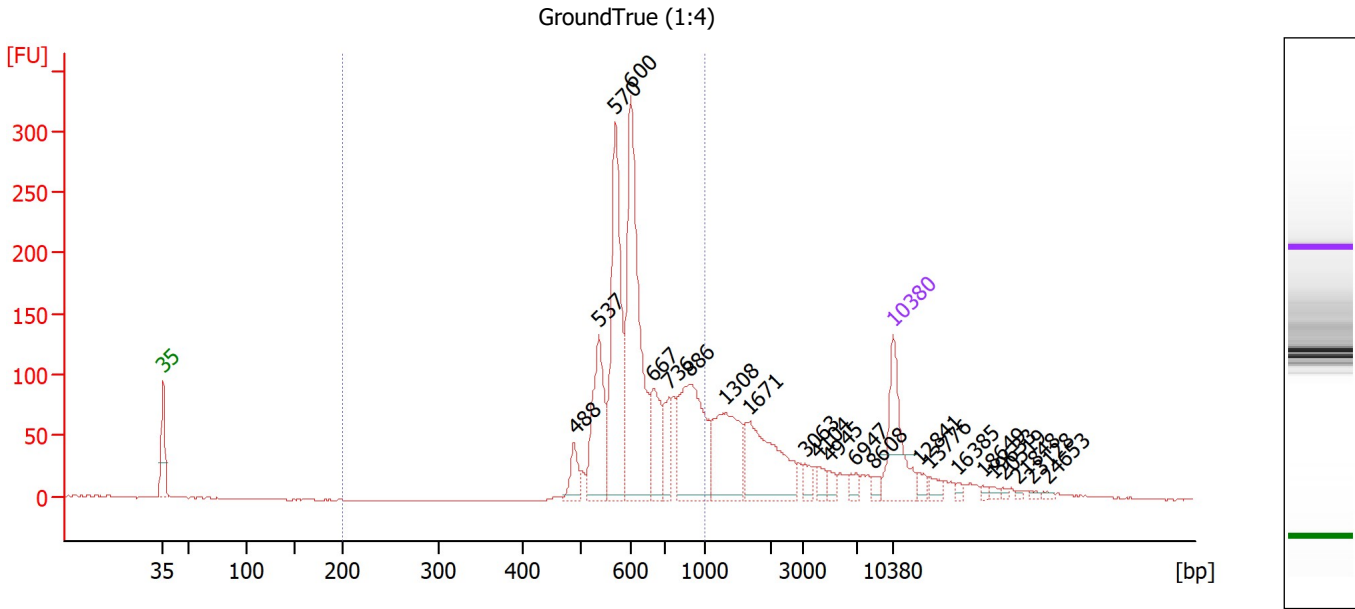
Region table for sample 7 : DTDB232

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	2,650.5	90	448	25.9	2,363.27	8,797.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : GroundTrue (1:4)

Number of peaks found: 23 Corr. Area 1: 1,624.3
 Noise: 0.4

Peak table for sample 8 : GroundTrue (1:4)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	488	32.15	99.8	
3	537	127.32	359.4	
4	570	223.91	595.0	
5	600	295.37	745.3	
6	667	69.62	158.2	
7	736	43.28	89.2	
8	886	167.91	287.2	
9	1,308	109.54	126.9	
10	1,671	115.71	104.9	
11	3,063	12.54	6.2	
12	4,104	11.30	4.2	
13	4,945	9.36	2.9	
14	6,947	9.53	2.1	
15	8,608	6.94	1.2	
16	10,380	75.00	10.9	Upper Marker
17	12,841	0.00	0.0	
18	13,776	0.00	0.0	
19	16,385	0.00	0.0	
20	18,649	0.00	0.0	
21	19,633	0.00	0.0	
22	20,519	0.00	0.0	
23	21,848	0.00	0.0	
24	23,128	0.00	0.0	
25	24,653	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...

... Region table for sample 8 :

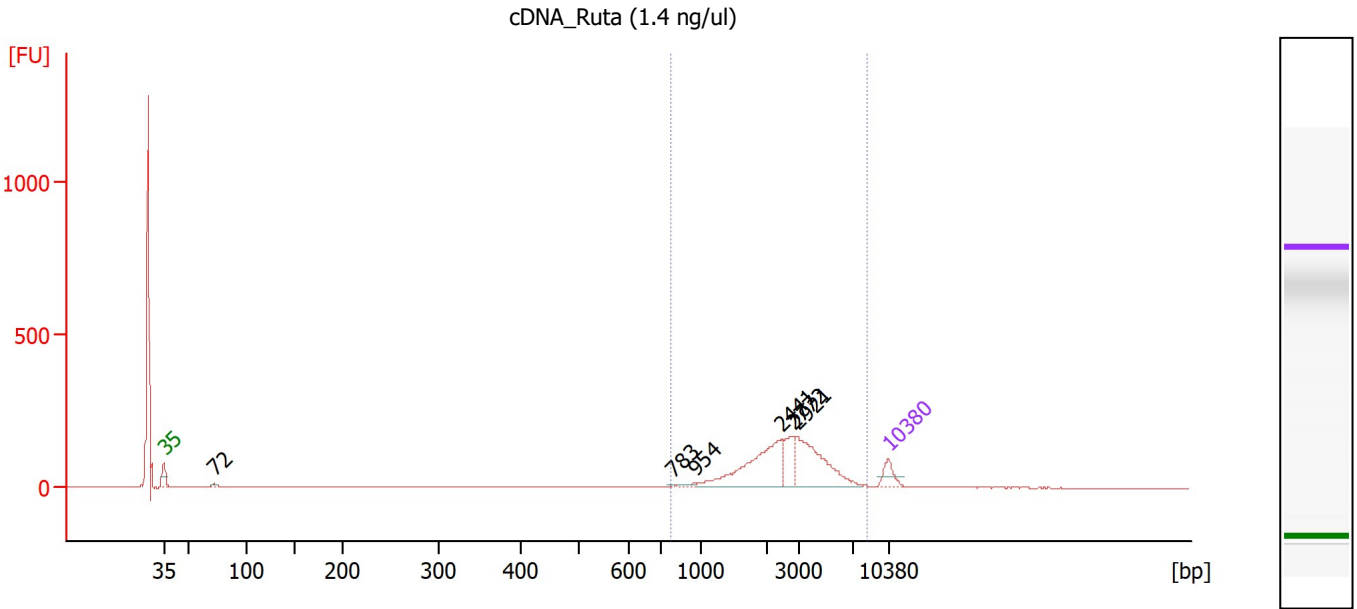
GroundTrue (1:4)

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	1,624.3	68	649	19.0	942.70	2,280.1	■

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : cDNA Ruta (1.4 ng/ul)

Number of peaks found: 6 Corr. Area 1: 1,308.9
 Noise: 0.5

Peak table for sample 9 : cDNA Ruta (1.4 ng/ul)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	72	15.46	323.3	
3	783	3.89	7.5	
4	954	16.16	25.7	
5	2,441	460.60	285.9	
6	2,772	147.47	80.6	
7	2,921	403.33	209.2	
8	10,380	75.00	10.9	Upper Marker

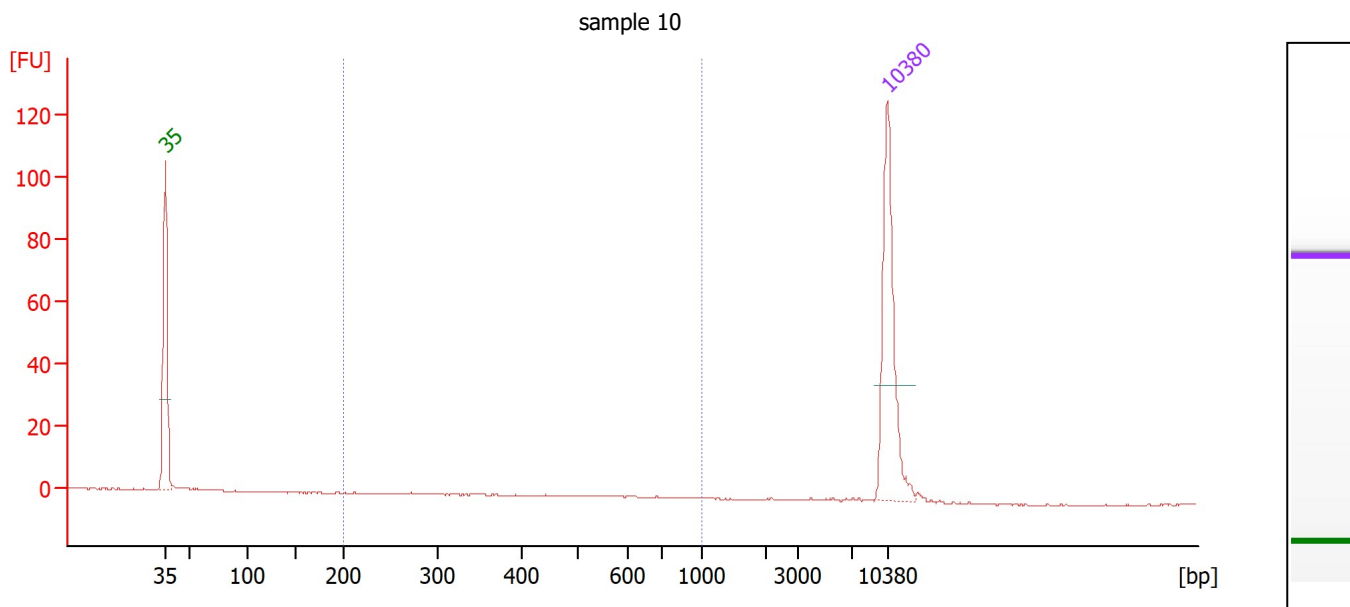
Region table for sample 9 : cDNA Ruta (1.4 ng/ul)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
763	8,325	1,308.9	61	2,942	47.6	1,056.41	668.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 0 Corr. Area 1: 0.2
 Noise: 0.2

Peak table for sample 10 : sample 10

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

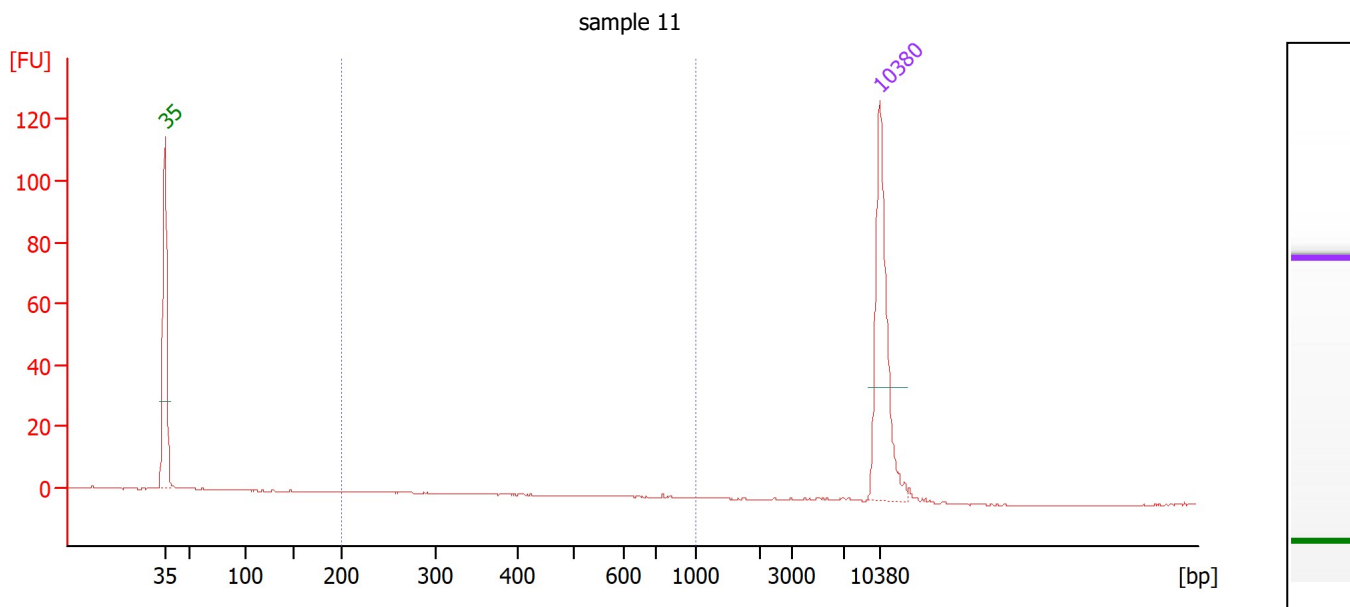
Region table for sample 10 : sample 10

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	0.2	3	572	22.2	0.14	0.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 0 Corr. Area 1: 0.6
 Noise: 0.1

Peak table for sample 11 : sample 11

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

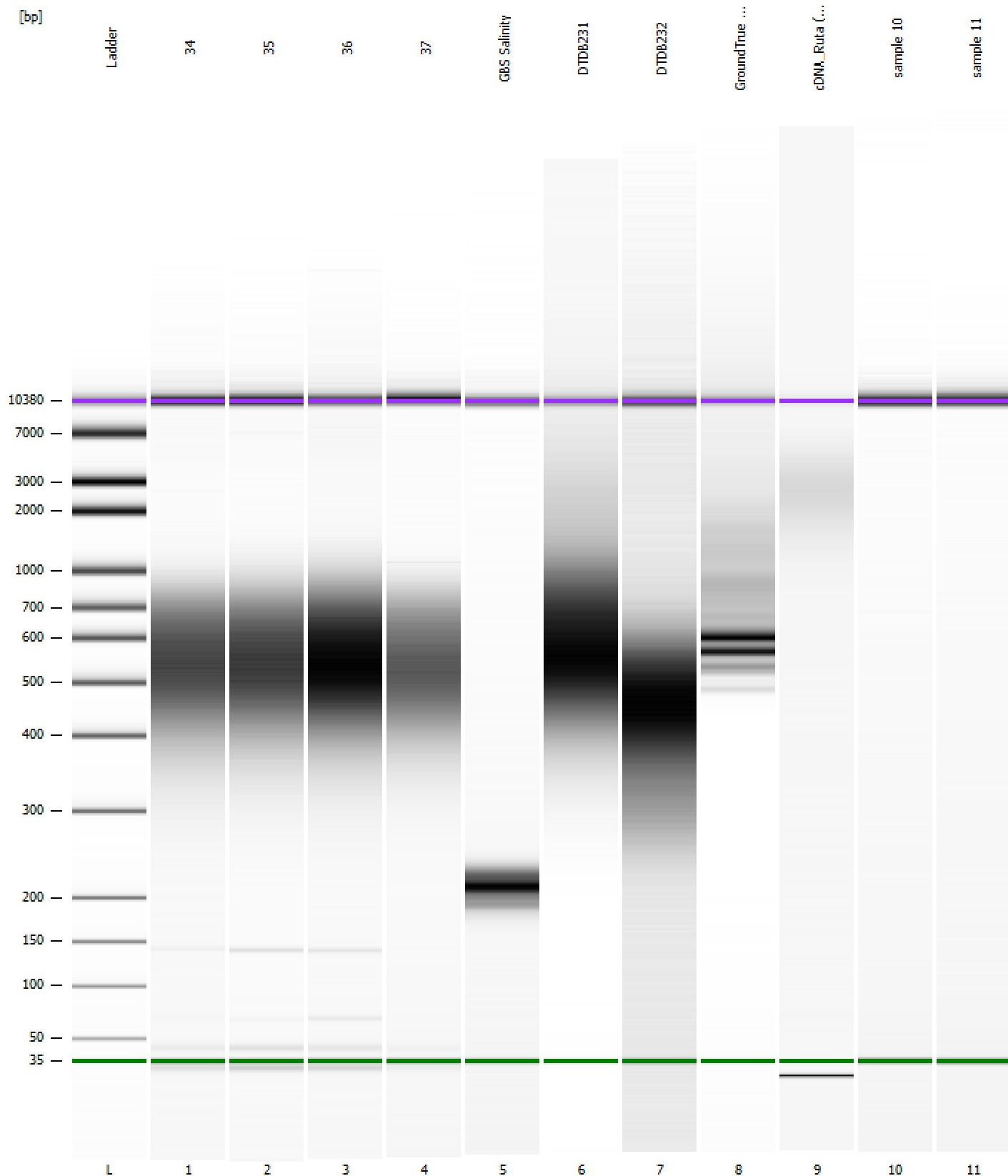
Region table for sample 11 : sample 11

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	0.6	7	468	49.7	0.51	2.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
Modified: 6/15/2020 3:19:19 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-15_002.xad

Created: 6/15/2020 2:26:57 PM
 Modified: 6/15/2020 3:19:19 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		6/15/2020 3:07:26 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-06-15\Bioanalyze r1_High Sensitivity DNA Assay_2020-06-15_002.xad)		Instrument	Run		6/15/2020 2:27:02 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		6/15/2020 2:27:02 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		6/15/2020 2:27:02 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		6/15/2020 2:27:02 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		6/15/2020 2:27:02 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		6/15/2020 2:27:02 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		6/15/2020 2:27:02 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB