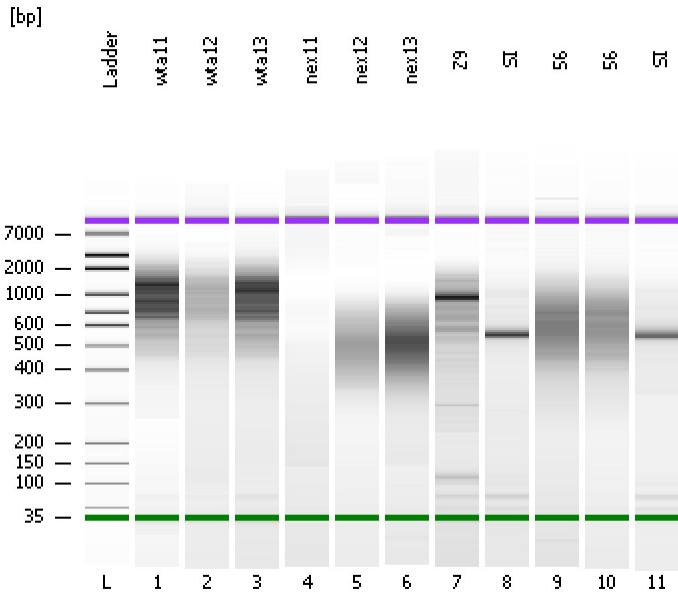


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
Modified: 12/12/2017 12:55:53 PM

Electrophoresis File Run Summary



Instrument Information:

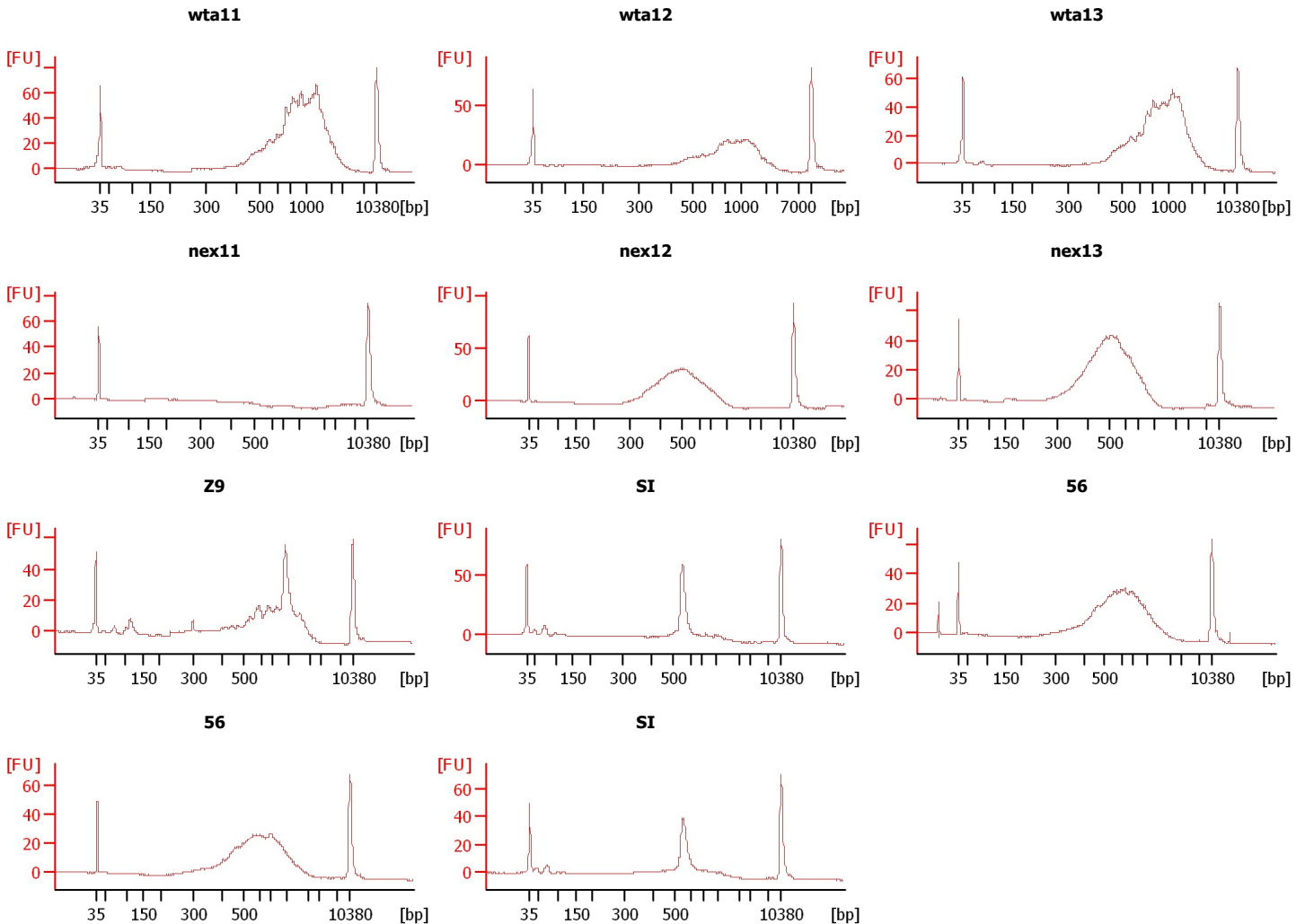
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
wta11		<input type="checkbox"/>	✓			
wta12		<input type="checkbox"/>	✓			
wta13		<input type="checkbox"/>	✓			
nex11		<input type="checkbox"/>	✓			
nex12		<input type="checkbox"/>	✓			
nex13		<input type="checkbox"/>	✓			
Z9		<input type="checkbox"/>	✓			
SI		<input type="checkbox"/>	✓			
56		<input type="checkbox"/>	✓			
56		<input type="checkbox"/>	✓			
SI		<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\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
Modified: 12/12/2017 12:55:53 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

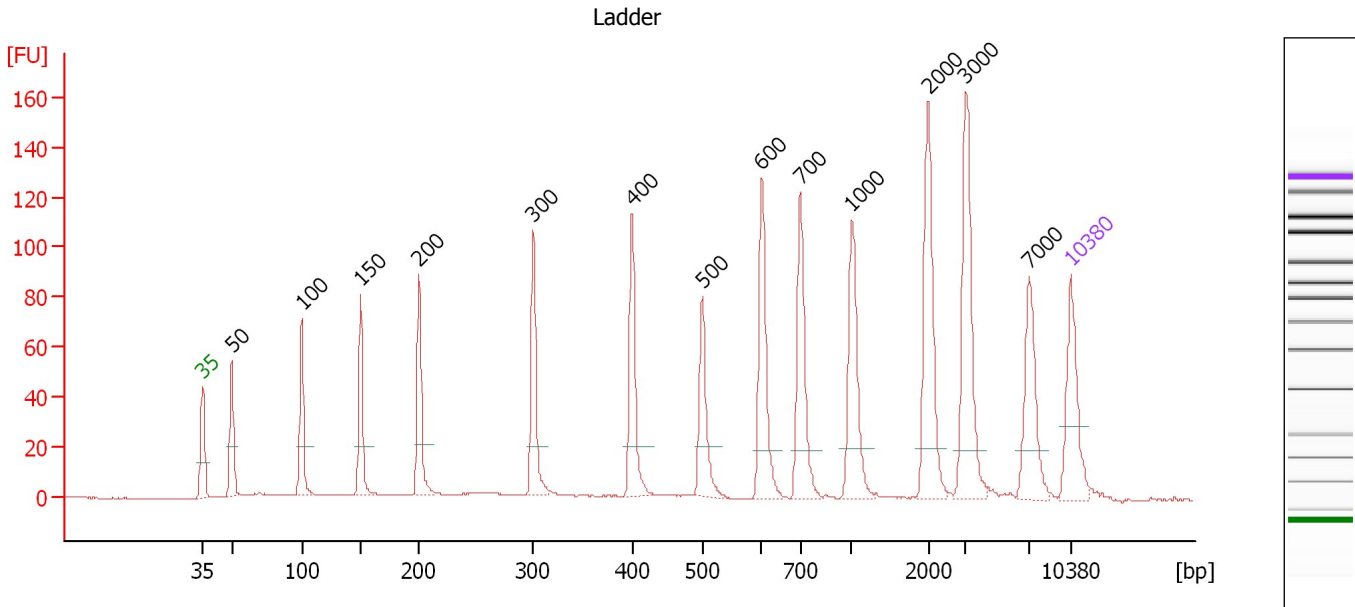
Ladder

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\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

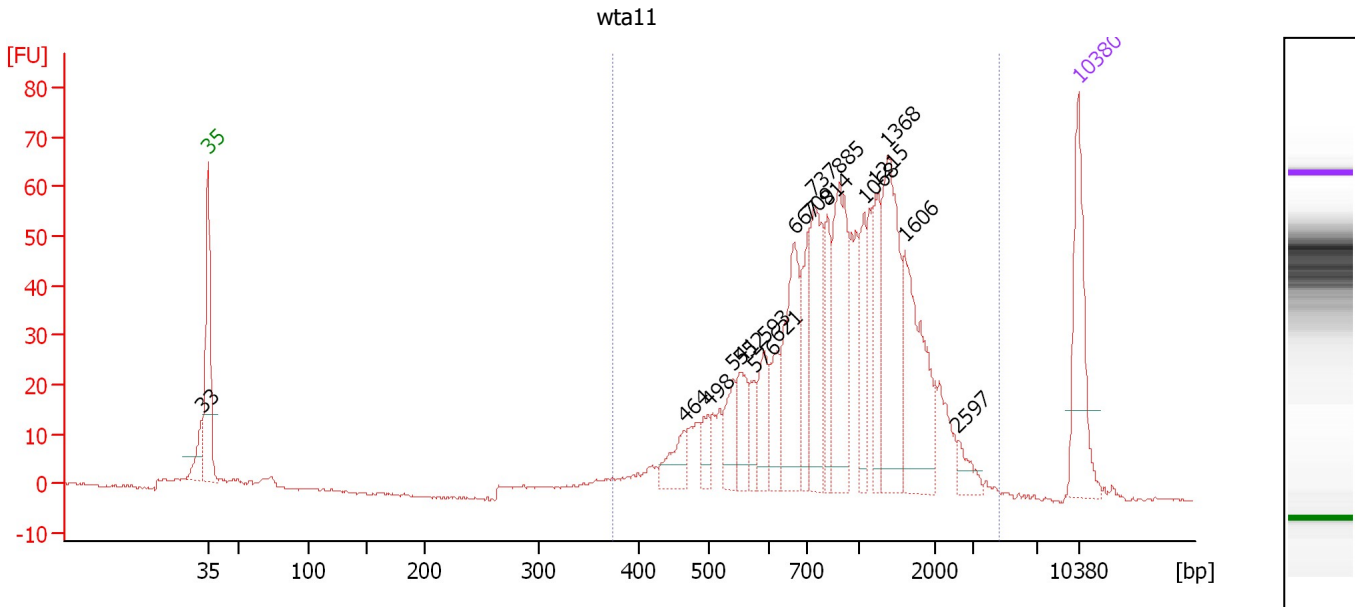
Peak table for Ladder

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	45.36
3	100	150.00	2,272.7	Ladder Peak	50.99
4	150	150.00	1,515.2	Ladder Peak	55.76
5	200	150.00	1,136.4	Ladder Peak	60.45
6	300	150.00	757.6	Ladder Peak	69.64
7	400	150.00	568.2	Ladder Peak	77.63
8	500	150.00	454.5	Ladder Peak	83.31
9	600	150.00	378.8	Ladder Peak	88.08
10	700	150.00	324.7	Ladder Peak	91.17
11	1,000	150.00	227.3	Ladder Peak	95.34
12	2,000	150.00	113.6	Ladder Peak	101.48
13	3,000	150.00	75.8	Ladder Peak	104.53
14	7,000	150.00	32.5	Ladder Peak	109.61
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : wta11

Number of peaks found: 18 Corr. Area 1: 965.1
 Noise: 0.2

Peak table for sample 1 : wta11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.49
2	35	125.00	5,411.3	Lower Marker	43.00
3	464	33.21	108.5		81.26
4	498	20.06	61.0		83.19
5	541	36.20	101.4		85.25
6	552	39.22	107.8		85.76
7	576	19.67	51.8		86.92
8	593	39.74	101.6		87.74
9	621	34.30	83.7		88.72
10	667	103.33	234.8		90.14
11	709	57.91	123.7		91.30
12	737	94.64	194.6		91.68
13	814	43.61	81.2		92.75
14	885	110.27	188.8		93.74
15	1,068	45.00	63.8		95.76
16	1,215	57.38	71.6		96.66
17	1,368	119.60	132.4		97.60
18	1,606	108.11	102.0		99.06
19	2,597	14.80	8.6		103.31
20	10,380	75.00	10.9	Upper Marker	113.00

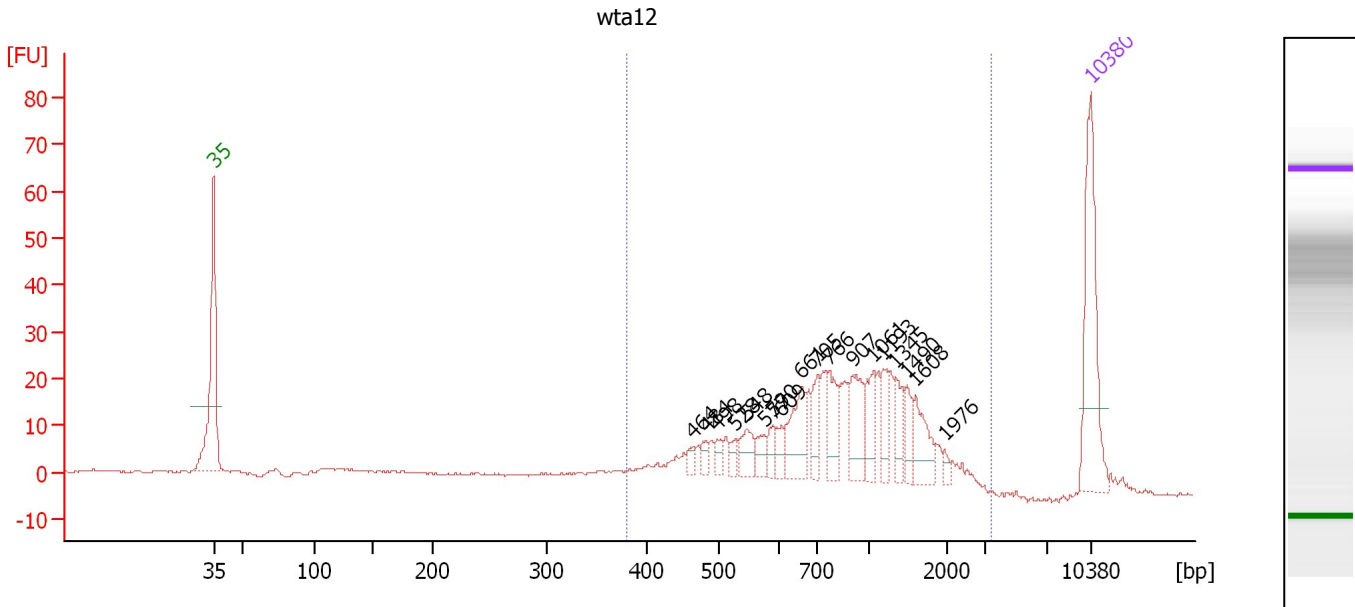
Region table for sample 1 : wta11

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
374	4,672	1,059	965.1	2,254.6	1,205.31	95	52.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : wta12

Number of peaks found: 18 Corr. Area 1: 418.4
 Noise: 0.2

Peak table for sample 2 : wta12

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	464	7.31	23.9		81.28
3	484	8.39	26.3		82.39
4	498	8.66	26.4		83.19
5	528	7.83	22.5		84.64
6	548	17.64	48.8		85.58
7	577	11.72	30.8		86.98
8	590	10.41	26.7		87.62
9	609	10.68	26.6		88.35
10	661	39.34	90.2		89.96
11	705	19.53	42.0		91.24
12	766	28.59	56.5		92.09
13	907	34.86	58.2		94.05
14	1,061	21.84	31.2		95.71
15	1,193	16.84	21.4		96.52
16	1,345	14.68	16.5		97.46
17	1,490	13.15	13.4		98.35
18	1,608	24.91	23.5		99.08
19	1,976	4.21	3.2		101.33
20	10,380	75.00	10.9	Upper Marker	113.00

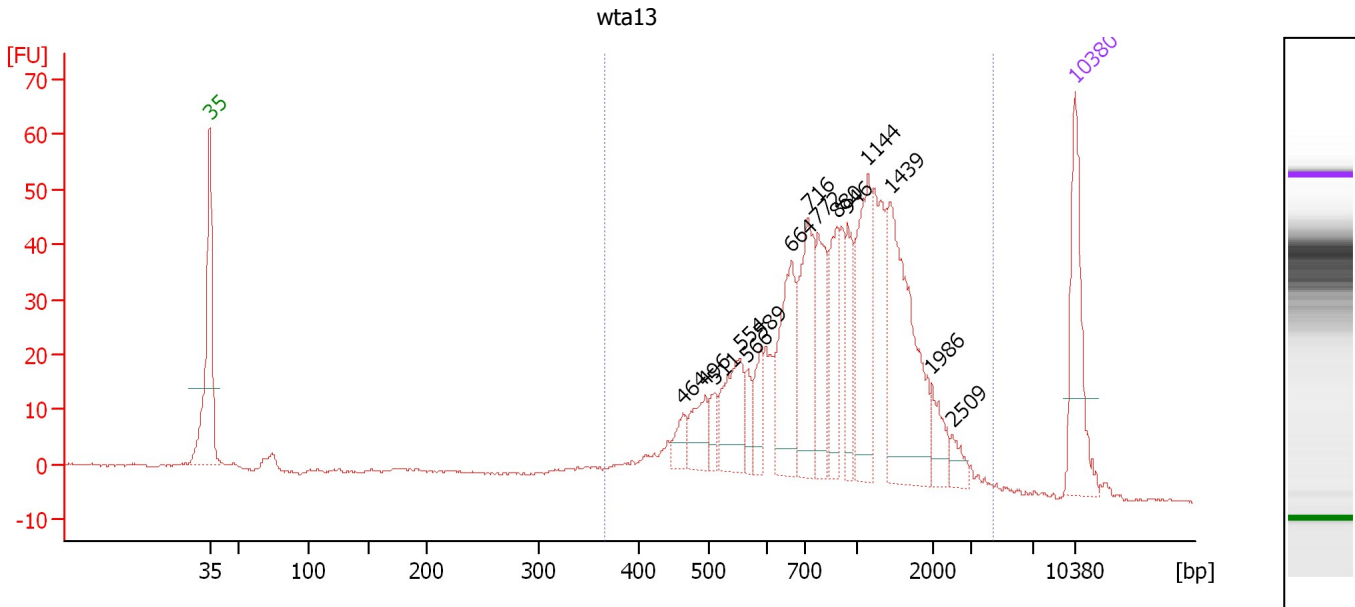
Region table for sample 2 : wta12

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
380	3,436	958	418.4	1,018.2	499.71	80	49.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : wta13

Number of peaks found: 15 Corr. Area 1: 844.4
 Noise: 0.2

Peak table for sample 3 : wta13

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	464	20.79	67.9		81.26
3	496	38.22	116.8		83.07
4	511	19.29	57.2		83.84
5	554	68.82	188.3		85.87
6	566	19.04	50.9		86.48
7	589	28.28	72.7		87.55
8	664	97.65	222.8		90.05
9	716	108.74	230.1		91.39
10	772	65.69	129.0		92.17
11	880	57.55	99.0		93.68
12	946	47.91	76.8		94.58
13	1,144	100.80	133.5		96.22
14	1,439	159.64	168.1		98.03
15	1,986	24.13	18.4		101.40
16	2,509	12.64	7.6		103.04
17	10,380	75.00	10.9	Upper Marker	113.00

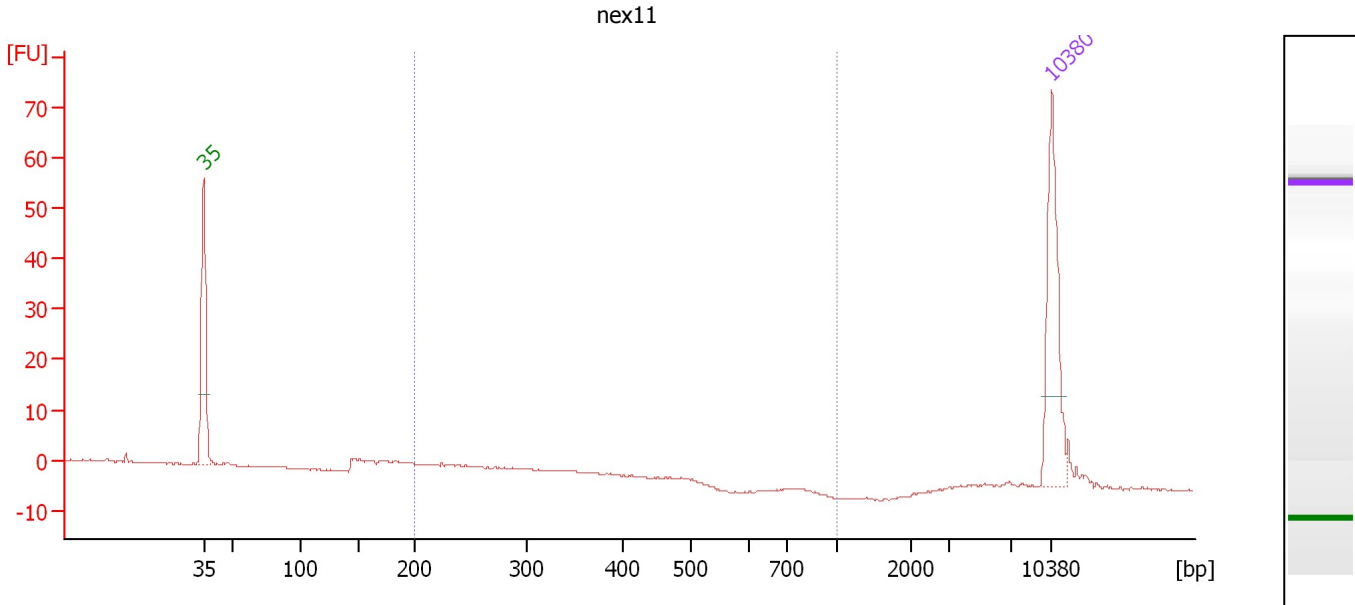
Region table for sample 3 : wta13

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
366	4,488	1,032	844.4	2,226.9	1,153.04	92	52.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : nex11

Number of peaks found: 0 Corr. Area 1: 18.8
 Noise: 0.2

Peak table for sample 4 : nex11

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	10,380	75.00	10.9	Upper Marker	113.00

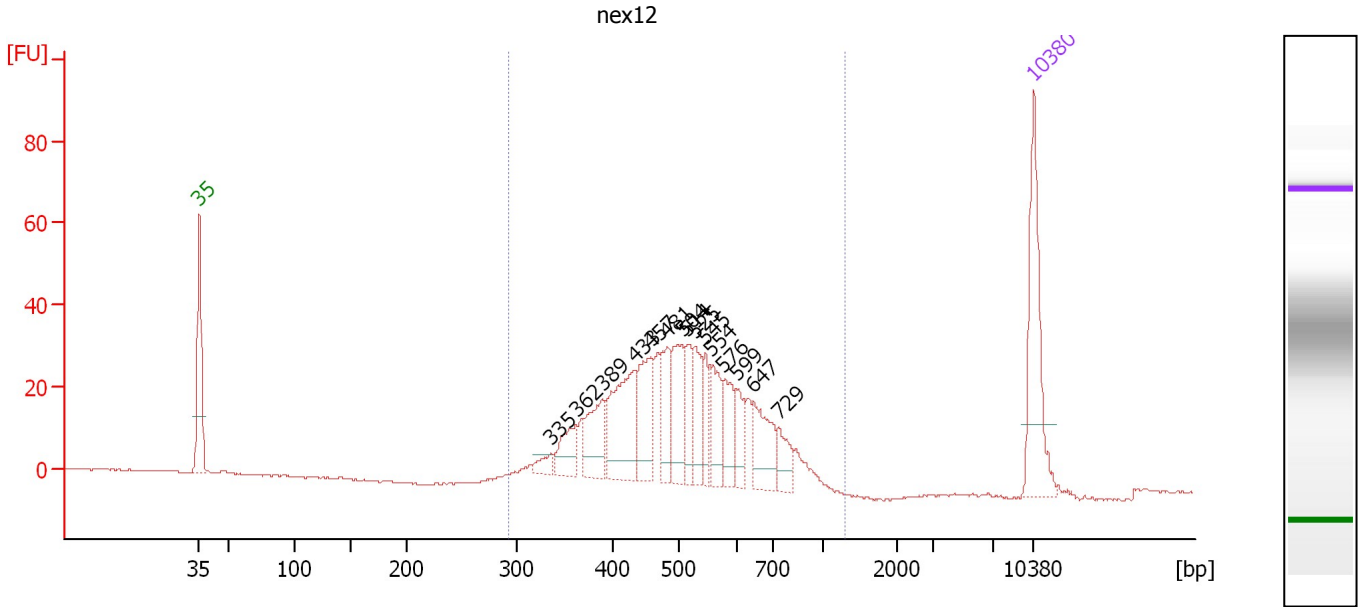
Region table for sample 4 : nex11

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	271	18.8	186.9	32.33	42	18.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : nex12

Number of peaks found: 15 Corr. Area 1: 591.9
 Noise: 0.2

Peak table for sample 5 : nex12

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	335	11.51	52.0		72.48
3	362	32.02	133.9		74.62
4	389	50.54	196.8		76.77
5	433	92.79	324.8		79.50
6	457	57.74	191.6		80.84
7	481	45.56	143.5		82.23
8	504	55.12	165.8		83.48
9	514	30.71	90.5		83.97
10	525	37.21	107.4		84.51
11	545	24.53	68.2		85.45
12	554	39.21	107.2		85.89
13	576	32.97	86.8		86.92
14	599	23.47	59.4		88.04
15	647	46.26	108.4		89.52
16	729	22.56	46.9		91.58
17	10,380	75.00	10.9	Upper Marker	113.00

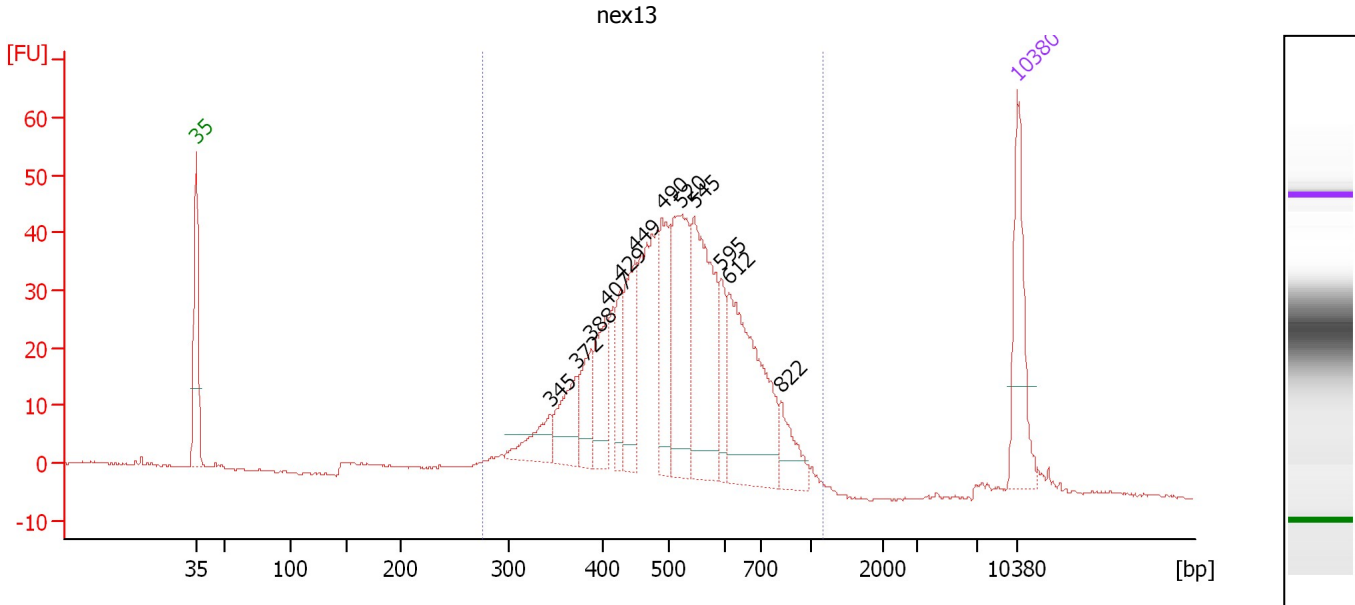
Region table for sample 5 : nex12

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
293	1,291	511	591.9	2,200.8	693.76	100	23.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : nex13

Number of peaks found: 12 Corr. Area 1: 824.4
 Noise: 0.2

Peak table for sample 6 : nex13

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	345	42.49	186.7		73.23
3	372	62.27	253.5		75.41
4	388	50.52	197.5		76.64
5	407	66.75	248.3		78.05
6	429	47.04	166.2		79.27
7	449	86.28	291.2		80.41
8	490	85.17	263.5		82.73
9	520	152.52	444.2		84.27
10	545	180.00	500.4		85.45
11	595	40.78	103.9		87.82
12	612	184.69	457.1		88.45
13	822	38.93	71.8		92.86
14	10,380	75.00	10.9	Upper Marker	113.00

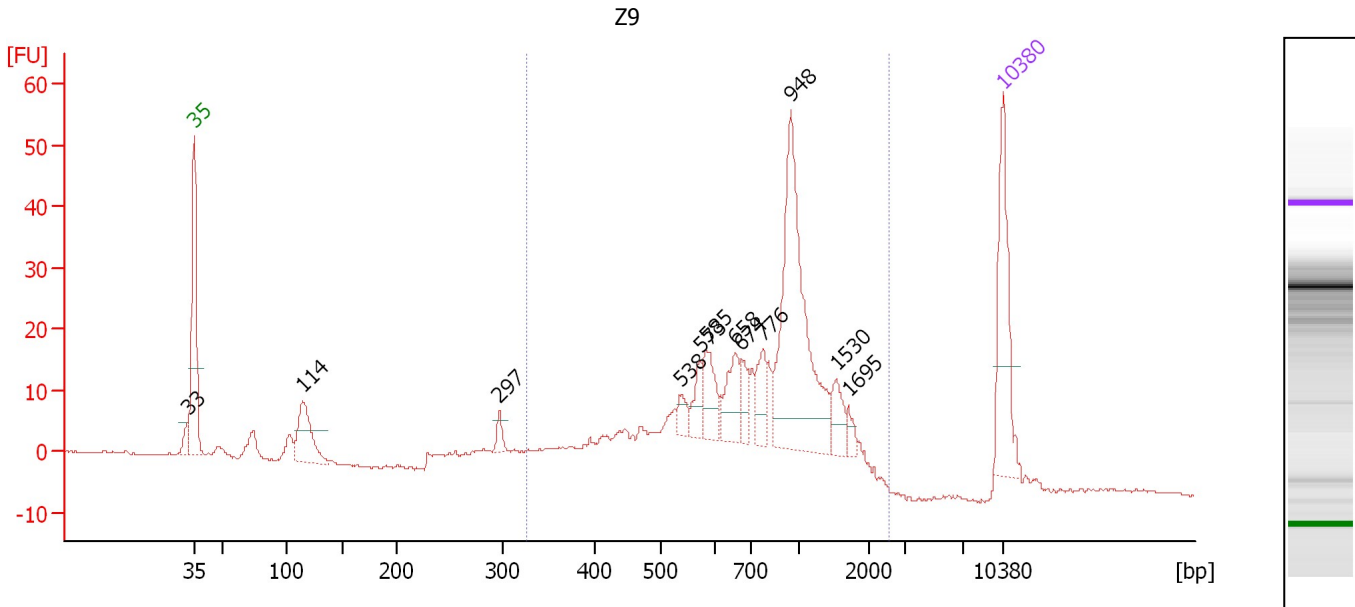
Region table for sample 6 : nex13

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
277	1,165	520	824.4	4,186.5	1,328.12	95	24.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Z9

Number of peaks found: 12 Corr. Area 1: 443.4
 Noise: 0.2

Peak table for sample 7 : Z9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.40
2	35	125.00	5,411.3	Lower Marker	43.00
3	114	73.01	966.3		52.37
4	297	11.70	59.6		69.41
5	538	13.50	38.0		85.11
6	573	20.41	54.0		86.77
7	585	35.03	90.7		87.37
8	658	36.57	84.2		89.87
9	674	17.96	40.4		90.37
10	776	27.31	53.3		92.22
11	948	207.18	331.0		94.62
12	1,530	21.00	20.8		98.59
13	1,695	7.87	7.0		99.61
14	10,380	75.00	10.9	Upper Marker	113.00

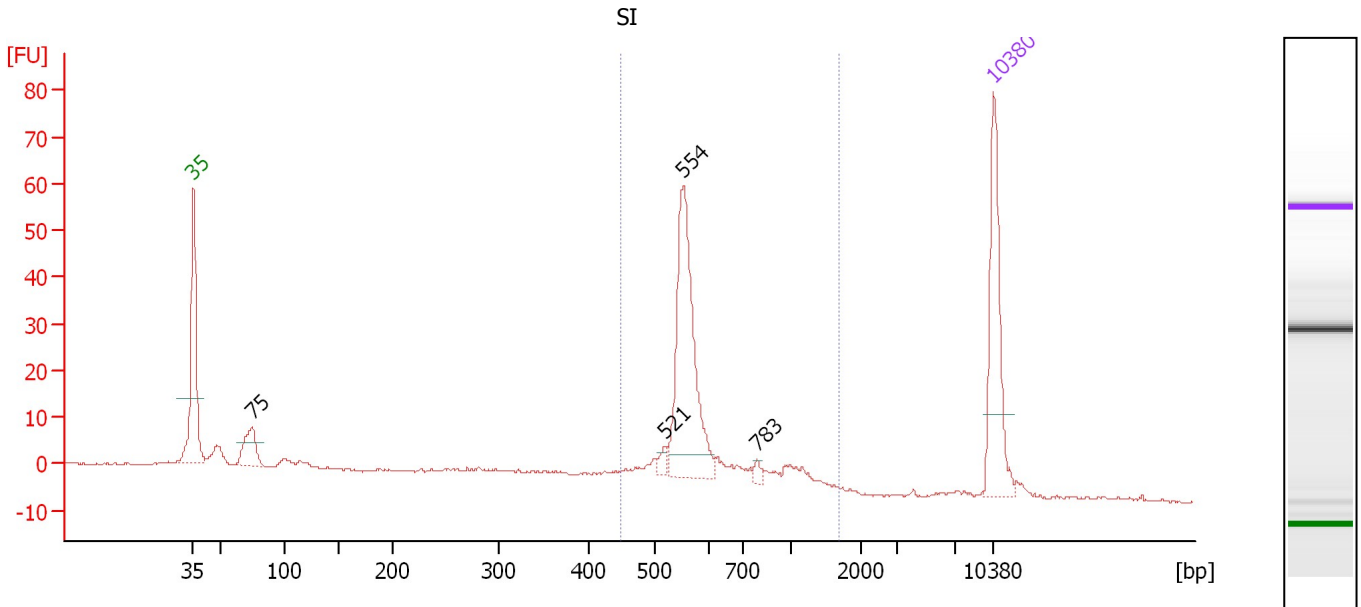
Region table for sample 7 : Z9

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
326	2,563	846	443.4	1,698.8	756.90	82	43.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : SI

Number of peaks found: 4 Corr. Area 1: 202.0
 Noise: 0.2

Peak table for sample 8 : SI

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	75	41.95	851.9		48.13
3	521	6.40	18.6		84.30
4	554	164.86	450.8		85.89
5	783	4.50	8.7		92.33
6	10,380	75.00	10.9	Upper Marker	113.00

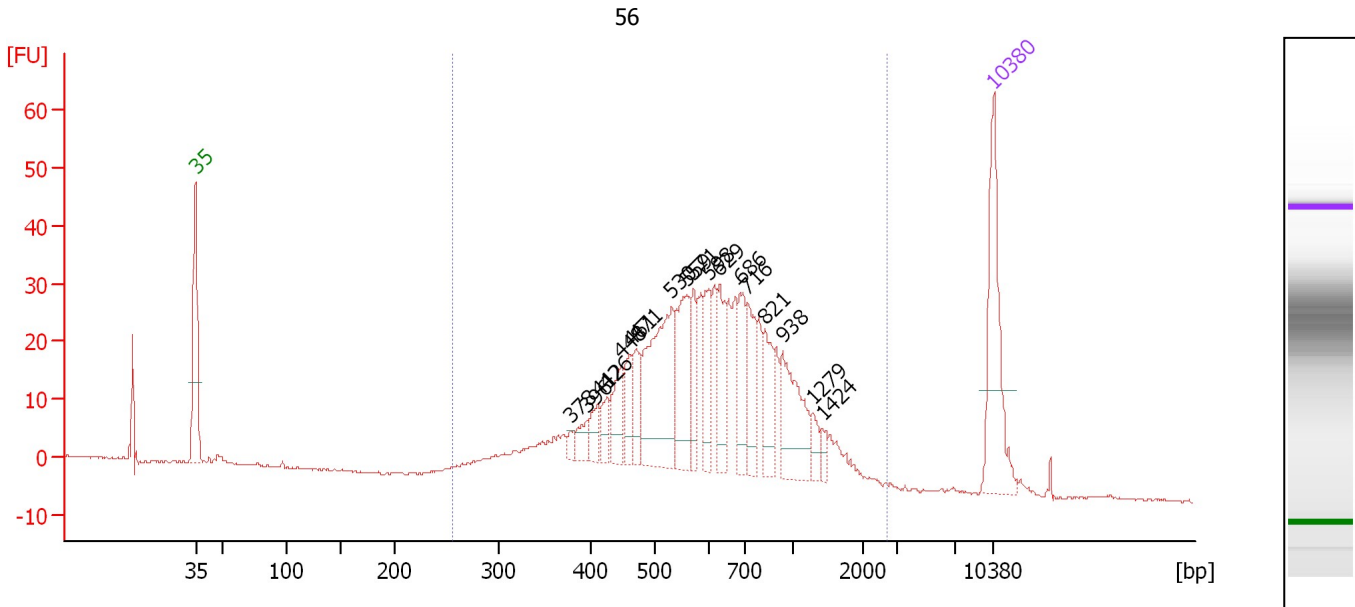
Region table for sample 8 : SI

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
450	1,676	630	202.0	649.8	253.20	62	29.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 56

Number of peaks found: 18 Corr. Area 1: 670.9
 Noise: 0.2

Peak table for sample 9 : 56

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	378	6.14	24.6		75.87
3	396	14.53	55.7		77.28
4	412	16.85	62.0		78.30
5	426	16.07	57.2		79.10
6	448	31.74	107.3		80.36
7	461	25.25	82.9		81.11
8	471	26.84	86.3		81.67
9	530	123.68	353.3		84.76
10	559	68.59	186.0		86.11
11	571	31.35	83.2		86.67
12	598	35.96	91.1		87.98
13	629	40.01	96.4		88.97
14	686	40.23	88.8		90.74
15	716	38.91	82.3		91.40
16	821	35.78	66.1		92.85
17	938	63.94	103.2		94.48
18	1,279	10.98	13.0		97.05
19	1,424	6.88	7.3		97.94
20	10,380	75.00	10.9	Upper Marker	113.00

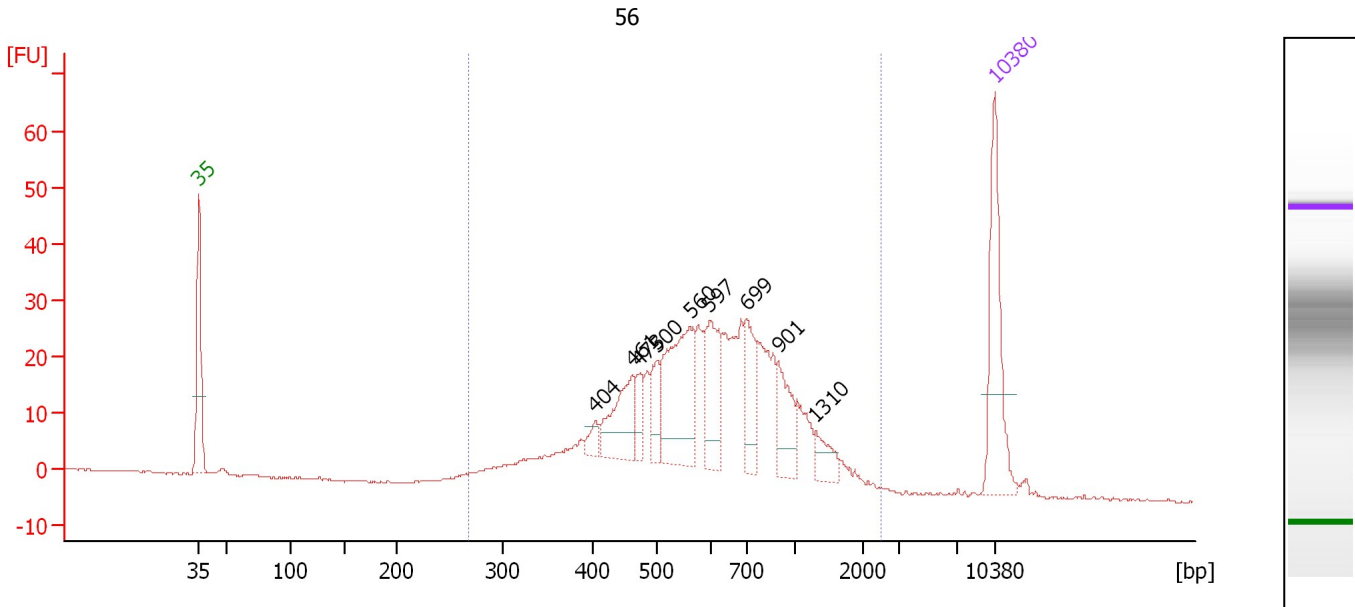
Region table for sample 9 : 56

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
255	2,701	676	670.9	2,710.6	991.74	96	46.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 56

Number of peaks found: 9 Corr. Area 1: 592.0
 Noise: 0.2

Peak table for sample 10 : 56

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	404	11.99	45.0		77.84
3	461	60.63	199.1		81.12
4	473	19.13	61.3		81.77
5	500	27.52	83.3		83.32
6	560	116.68	315.5		86.18
7	597	61.56	156.3		87.92
8	699	47.30	102.5		91.15
9	901	41.08	69.1		93.96
10	1,310	19.44	22.5		97.25
11	10,380	75.00	10.9	Upper Marker	113.00

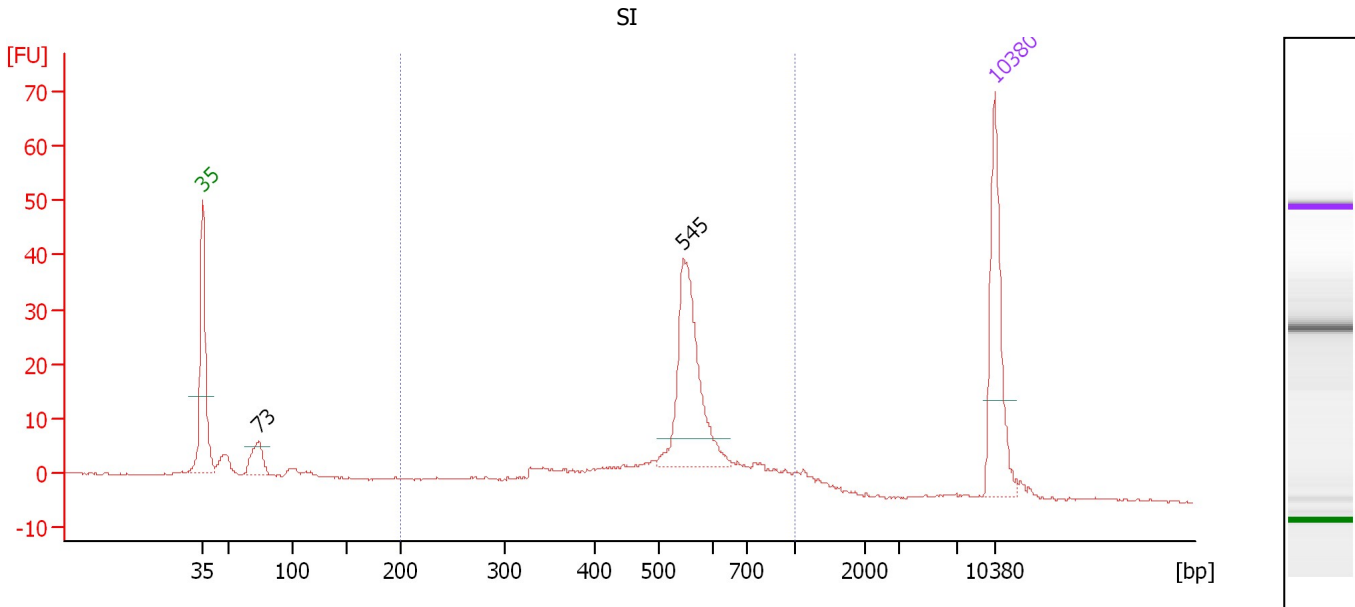
Region table for sample 10 : 56

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
269	2,500	676	592.0	2,371.4	873.24	98	45.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
 Modified: 12/12/2017 12:55:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : SI

Number of peaks found: 2 Corr. Area 1: 221.0
 Noise: 0.1

Peak table for sample 11 : SI

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	73	31.91	662.9		47.95
3	545	138.87	386.2		85.44
4	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : SI

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	544	221.0	1,003.1	322.65	77	25.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-12\2017-12-12_001.xad

Created: 12/12/2017 12:02:45 PM
Modified: 12/12/2017 12:55:53 PM

Gel Image

