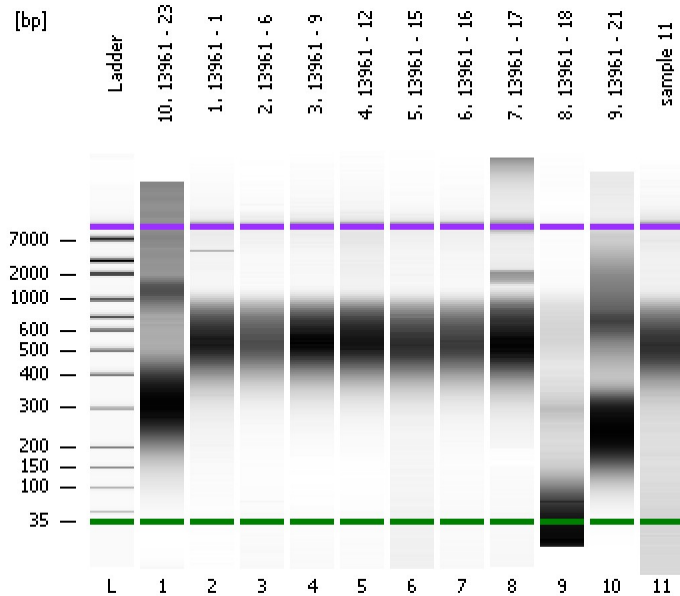


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
Modified: 12/13/2017 4:41:20 PM

Electrophoresis File Run Summary



Instrument Information:

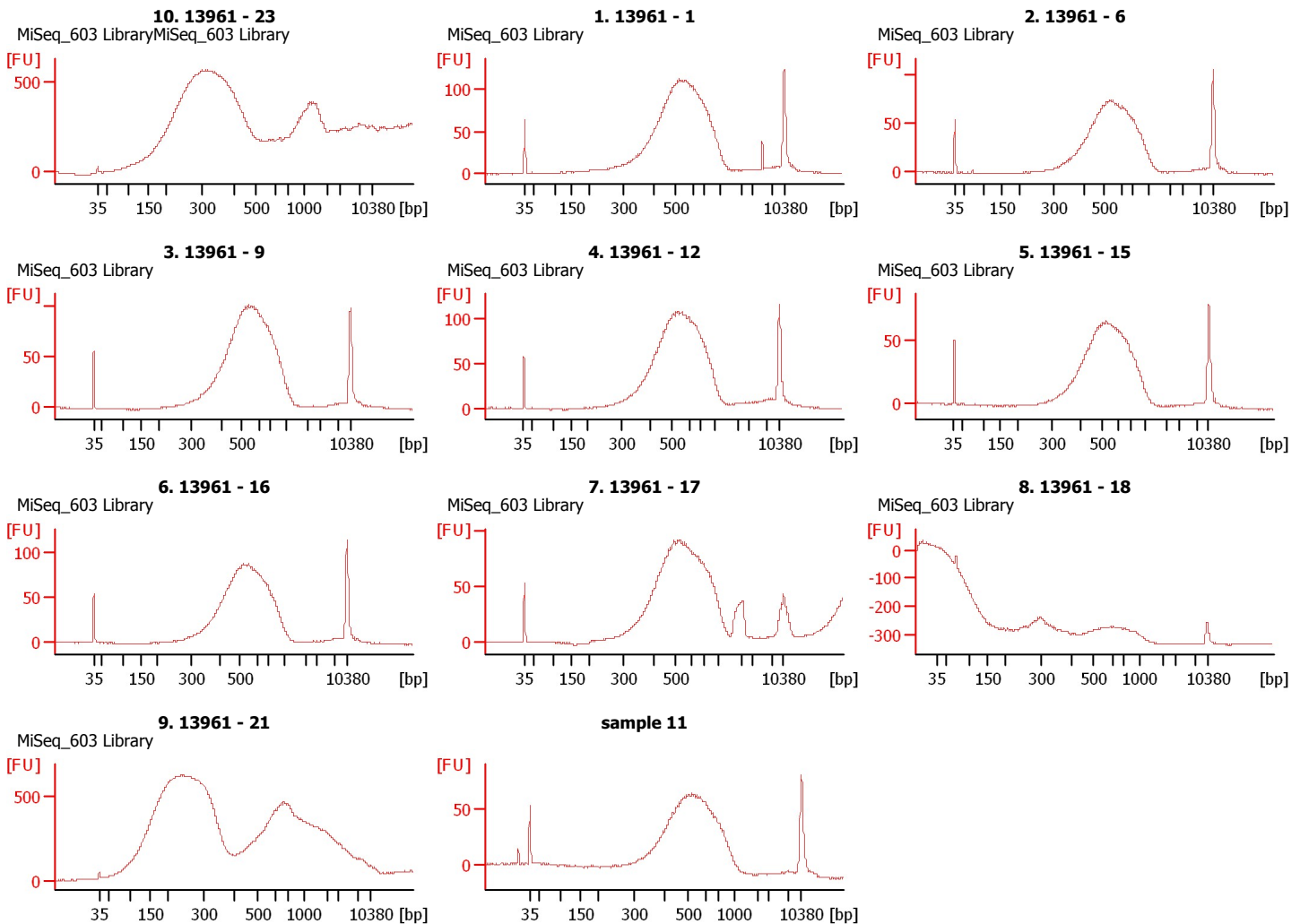
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
Modified: 12/13/2017 4:41:20 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
10. 13961 - 23	MiSeq_603 LibraryMiSeq_603 Library	<input type="checkbox"/>	✓			
1. 13961 - 1	MiSeq_603 Library	<input type="checkbox"/>	✓			
2. 13961 - 6	MiSeq_603 Library	<input type="checkbox"/>	✓			
3. 13961 - 9	MiSeq_603 Library	<input type="checkbox"/>	✓			
4. 13961 - 12	MiSeq_603 Library	<input type="checkbox"/>	✓			
5. 13961 - 15	MiSeq_603 Library	<input type="checkbox"/>	✓			
6. 13961 - 16	MiSeq_603 Library	<input type="checkbox"/>	✓			
7. 13961 - 17	MiSeq_603 Library	<input type="checkbox"/>	✓			
8. 13961 - 18	MiSeq_603 Library	<input type="checkbox"/>	✓			
9. 13961 - 21	MiSeq_603 Library	<input type="checkbox"/>	✓			
sample 11		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

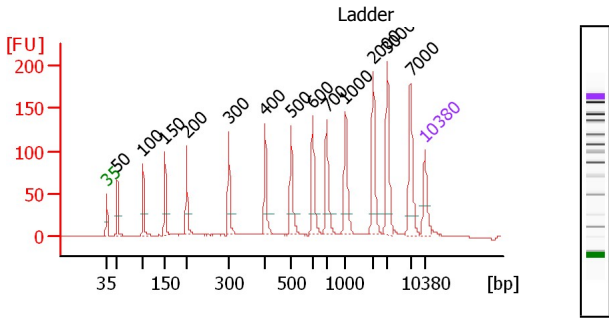
Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
 Modified: 12/13/2017 4:41:20 PM

Electropherogram Summary



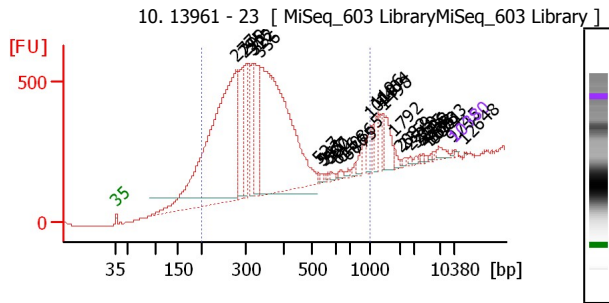
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.34
3	100	150.00	2,272.7	Ladder Peak	51.04
4	150	150.00	1,515.2	Ladder Peak	55.82
5	200	150.00	1,136.4	Ladder Peak	60.60
6	300	150.00	757.6	Ladder Peak	69.84
7	400	150.00	568.2	Ladder Peak	77.84
8	500	150.00	454.5	Ladder Peak	83.58
9	600	150.00	378.8	Ladder Peak	88.32
10	700	150.00	324.7	Ladder Peak	91.40
11	1,000	150.00	227.3	Ladder Peak	95.58
12	2,000	150.00	113.6	Ladder Peak	101.60
13	3,000	150.00	75.8	Ladder Peak	104.73

Overall Results for Ladder

Noise: 0.1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
14	7,000	150.00	32.5	Ladder Peak	109.78
15	10,380	75.00	10.9	Upper Marker	113.00



Overall Results for sample 1 : 10.13961 - 23

Number of peaks found: 33
 Noise: 0.4
 Corr. Area 1: 11,494.5

Region table for sample 1 : 10.13961 - 23

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	% of Total	Size distribution in CV [%]
200	1,000	346	11,494.5	71,519.23	352,265.7	86	38.7

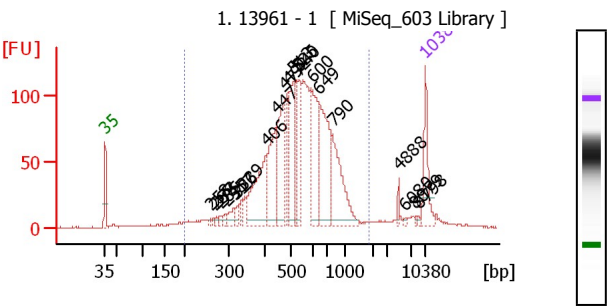
Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
 Modified: 12/13/2017 4:41:20 PM

Electropherogram Summary Continued ...

Peak table for sample 1 : 10.13961 - 23

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	277	31,745.52	173,460.1		67.74
3	295	5,569.91	28,602.3		69.38
4	299	3,426.64	17,348.9		69.77
5	315	2,689.38	12,921.7		71.07
6	322	5,417.81	25,464.2		71.63
7	336	27,451.40	123,639.5		72.75
8	527	134.46	386.9		84.84
9	543	122.02	340.5		85.62
10	551	129.26	355.3		86.01
11	567	114.03	304.9		86.74
12	580	233.29	609.9		87.35
13	616	98.00	241.0		88.82
14	640	187.27	443.3		89.55
15	686	190.73	421.1		90.98
16	775	186.77	365.1		92.44
17	865	486.15	851.6		93.70
18	1,010	857.13	1,285.9		95.64
19	1,196	621.62	787.2		96.76
20	1,404	538.94	581.4		98.02



Overall Results for sample 2 : 1.13961 - 1

Number of peaks found: 22
 Noise: 0.5
 Corr. Area 1: 2,195.5

Region table for sample 2 : 1.13961 - 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	% of Size distribution Total in CV [%]
200	1,833	566	2,195.5	1,946.6	5,973.3	94

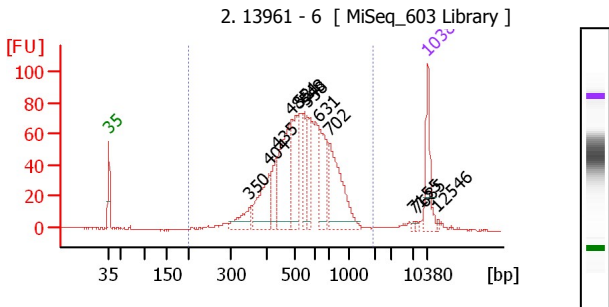
Peak table for sample 2 : 1.13961 - 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	258	6.38	37.4		66.00
3	267	5.83	33.1		66.77
4	273	7.48	41.6		67.32
5	285	11.27	59.9		68.46
6	295	11.67	59.8		69.42
7	317	29.13	139.2		71.20
8	326	14.48	67.3		71.93
9	339	15.51	69.4		72.93
10	406	201.08	750.5		78.18
11	447	176.66	598.4		80.56
12	477	173.38	550.2		82.29
13	492	81.97	252.6		83.11
14	513	143.53	423.8		84.21
15	525	70.19	202.7		84.75
16	540	89.23	250.3		85.48
17	600	138.08	348.8		88.31
18	649	225.62	526.9		89.82
19	790	170.72	327.6		92.65
20	4,888	6.31	2.0		107.11
21	6,080	3.26	0.8		108.62
22	8,079	3.25	0.6		110.81
23	8,798	3.39	0.6		111.49
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
 Modified: 12/13/2017 4:41:20 PM

Electropherogram Summary Continued ...



Peak table for sample 3 : 2. 13961 - 6

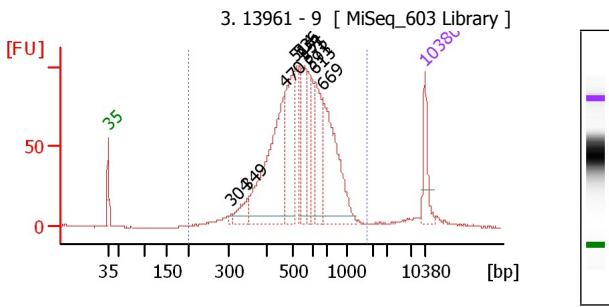
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	350	56.91	246.0		73.88
3	404	123.49	463.6		78.05
4	435	84.66	295.1		79.83
5	485	211.21	659.9		82.72
6	521	152.50	443.2		84.60
7	548	50.51	139.5		85.88
8	558	92.34	250.7		86.34
9	631	101.85	244.6		89.27
10	702	198.99	429.6		91.42
11	7,155	2.57	0.5		109.93
12	7,685	3.12	0.6		110.43
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,546	0.00	0.0		115.06

Overall Results for sample 3 : 2. 13961 - 6

Number of peaks found: 12
 Noise: 0.2
 Corr. Area 1: 1,386.5

Region table for sample 3 : 2. 13961 - 6

From To [bp]	Average Size [bp]	Corr. Area [pg/μl]	Conc. [pg/μl]	Molarity [pmol/l]	% of Size distribution Total in CV [%]
200 1,907 572	1,386.5	1,330.9	3,904.9	97	30.1



Peak table for sample 4 : 3. 13961 - 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	304	8.41	41.9		70.18
3	349	62.93	273.1		73.78
4	470	483.73	1,559.8		81.85
5	514	289.77	854.0		84.25
6	536	80.69	228.3		85.27
7	551	162.10	445.6		86.01
8	575	94.26	248.6		87.11
9	591	82.55	211.6		87.90
10	613	166.88	412.3		88.73
11	669	359.59	814.7		90.44
12	10,380	75.00	10.9	Upper Marker	113.00

Overall Results for sample 4 : 3. 13961 - 9

Number of peaks found: 10
 Noise: 0.3
 Corr. Area 1: 1,893.6

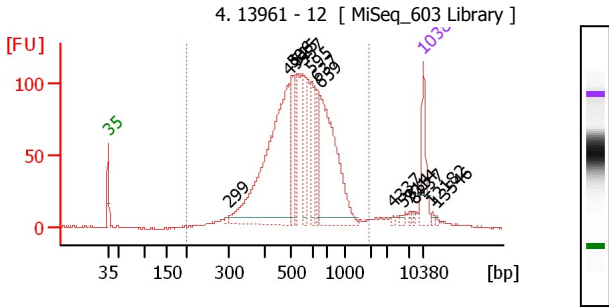
Region table for sample 4 : 3. 13961 - 9

From To [bp]	Average Size [bp]	Corr. Area [pg/μl]	Conc. [pg/μl]	Molarity [pmol/l]	% of Size distribution Total in CV [%]
200 1,793 571	1,893.6	1,963.3	5,809.0	97	30.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
 Modified: 12/13/2017 4:41:20 PM

Electropherogram Summary Continued ...



Peak table for sample 5 : 4. 13961 - 12

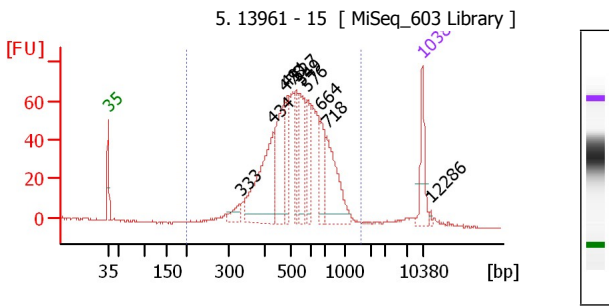
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	299	8.04	40.7		69.75
3	494	659.92	2,024.1		83.24
4	506	115.92	346.8		83.89
5	525	68.02	196.3		84.77
6	557	108.80	295.8		86.30
7	595	93.32	237.8		88.06
8	637	58.35	138.8		89.45
9	659	372.68	856.4		90.15
10	4,337	3.61	1.3		106.42
11	5,914	5.76	1.5		108.41
12	7,214	3.71	0.8		109.99
13	8,237	3.56	0.7		110.96
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,182	0.00	0.0		114.72
16	13,546	0.00	0.0		116.01

Overall Results for sample 5 : 4. 13961 - 12

Number of peaks found: 14
 Noise: 0.4
 Corr. Area 1: 2,083.3

Region table for sample 5 : 4. 13961 - 12

From To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	% of Size distribution Total in CV [%]
200 1,875 578	2,083.3	1,840.3	5.431.5	95	33.4



Peak table for sample 6 : 5. 13961 - 15

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	333	41.85	190.4		72.49
3	434	310.80	1,085.1		79.79
4	478	233.61	739.7		82.35
5	491	77.33	238.8		83.05
6	527	63.11	181.5		84.86
7	549	100.70	278.1		85.88
8	576	95.30	250.6		87.19
9	664	97.47	222.3		90.30
10	718	195.42	412.3		91.65
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,286	0.00	0.0		114.81

Overall Results for sample 6 : 5. 13961 - 15

Number of peaks found: 10
 Noise: 0.5
 Corr. Area 1: 1,264.5

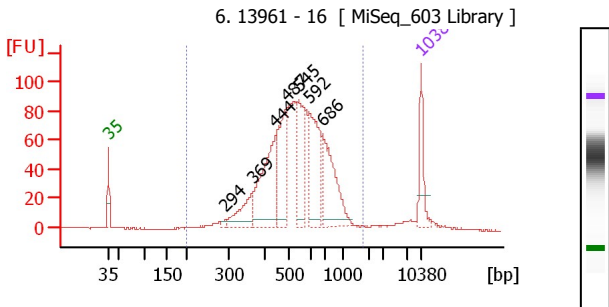
Region table for sample 6 : 5. 13961 - 15

From To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	% of Size distribution Total in CV [%]
200 1,609 560	1,264.5	1,612.6	4.809.1	97	28.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
 Modified: 12/13/2017 4:41:20 PM

Electropherogram Summary Continued ...



Peak table for sample 7 : 6.13961 - 16

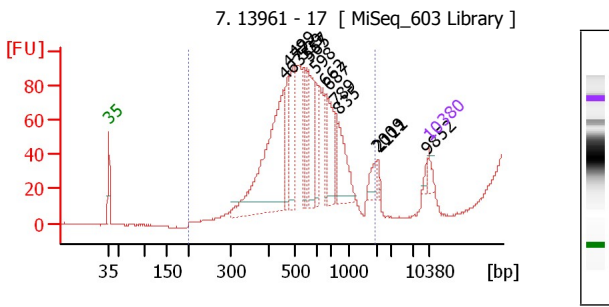
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	294	10.60	54.7		69.25
3	369	114.79	471.0		75.38
4	444	278.47	949.6		80.39
5	487	225.76	702.8		82.82
6	545	193.68	538.3		85.72
7	592	234.79	601.4		87.92
8	686	227.19	501.9		90.96
9	10,380	75.00	10.9	Upper Marker	113.00

Overall Results for sample 7 : 6.13961 - 16

Number of peaks found: 7
 Noise: 0.4
 Corr. Area 1: 1,672.9

Region table for sample 7 : 6.13961 - 16

From To [bp]	Average Size [bp]	Corr. Area [pg/μl]	Conc. [pg/μl]	Molarity [pmol/l]	% of Size distribution Total in CV [%]
200 1,739	561	1,672.9	1,636.2	4,935.9	96 30.7



Peak table for sample 8 : 7.13961 - 17

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	463	2,157.25	7,062.5		81.45
3	477	438.14	1,391.4		82.27
4	499	639.35	1,943.0		83.50
5	539	290.48	816.9		85.42
6	557	260.44	708.3		86.29
7	565	581.66	1,560.3		86.65
8	598	301.90	765.4		88.21
9	662	226.16	518.0		90.21
10	687	466.45	1,029.1		90.99
11	789	160.17	307.7		92.63
12	835	478.13	868.1		93.27
13	2,009	146.07	110.2		101.63
14	2,111	35.52	25.5		101.95
15	9,852	42.92	6.6		112.50
16	10,380	75.00	10.9	Upper Marker	113.00

Overall Results for sample 8 : 7.13961 - 17

Number of peaks found: 14
 Noise: 0.3
 Corr. Area 1: 1,235.2

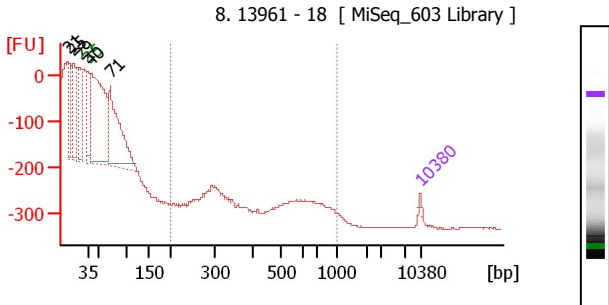
Region table for sample 8 : 7.13961 - 17

From To [bp]	Average Size [bp]	Corr. Area [pg/μl]	Conc. [pg/μl]	Molarity [pmol/l]	% of Size distribution Total in CV [%]
200 1,971	577	1,235.2	5,733.4	16,387.6	99 32.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
 Modified: 12/13/2017 4:41:20 PM

Electropherogram Summary Continued ...



Peak table for sample 9 : 8.13961 - 18

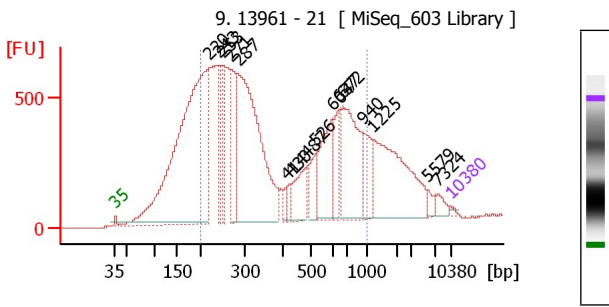
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	21	0.00	0.0		39.00
2	25	0.00	0.0		40.01
3	29	0.00	0.0		41.29
4	35	125.00	5,411.3	Lower Marker	43.00
5	40	9,400.21	355,549.7		43.79
6	71	5,707.98	121,733.5		47.74
7	10,380	75.00	10.9	Upper Marker	113.00

Overall Results for sample 9 : 8.13961 - 18

Number of peaks found: 5
 Noise: 0.9
 Corr. Area 1: 0.0

Region table for sample 9 : 8.13961 - 18

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



Peak table for sample 10 : 9.13961 - 21

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	220	21,424.37	147,418.4		62.47
3	243	1,580.42	9,855.5		64.57
4	253	1,533.29	9,194.9		65.47
5	271	3,275.68	18,342.5		67.12
6	287	12,316.58	65,010.2		68.65
7	414	316.67	1,157.6		78.67
8	430	335.56	1,182.2		79.57
9	487	1,645.73	5,120.9		82.83
10	526	905.20	2,608.7		84.80
11	604	2,891.49	7,258.6		88.43
12	637	1,115.36	2,653.0		89.46
13	672	4,198.94	9,469.0		90.53
14	940	1,465.36	2,362.8		94.74

Overall Results for sample 10 : 9.13961 - 21

Number of peaks found: 16
 Noise: 0.6
 Corr. Area 1: 18,041.9

Region table for sample 10 : 9.13961 - 21

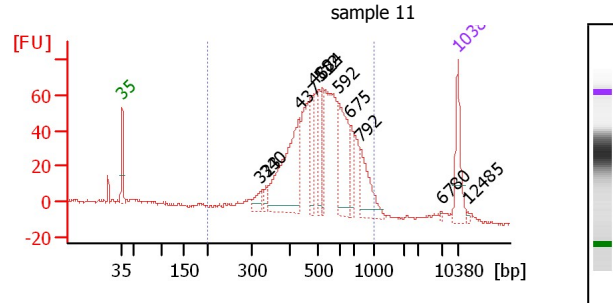
From [bp]	To [bp]	Average Size [bp]	Corr. Area [pg/μl]	Conc. [pg/μl]	Molarity [pmol/l]	% of Size distribution Total in CV [%]
200	1,000	421	18,041.9	45,821.5	218,557.8	66.49

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
 Modified: 12/13/2017 4:41:20 PM

Electropherogram Summary Continued ...

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
15	1,225	4,780.99	5,915.8		96.93
16	5,579	240.93	65.4		107.99
17	7,324	302.79	62.6		110.09
18	10,380	75.00	10.9	Upper Marker	113.00



Overall Results for sample 11 : sample 11

Number of peaks found: 11
 Noise: 0.8
 Corr. Area 1: 1,365.4

Region table for sample 11 : sample 11

From To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	% of Total	Size distribution Total in CV [%]	
200	1,000	534	1,365.4	1,480.6	4,655.5	89	26.7

Peak table for sample 11 : sample 11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time
1	35	125.00	5,411.3	Lower Marker	43.00
2	323	29.47	138.3		71.66
3	340	18.02	80.4		73.01
4	437	311.18	1,079.2		79.96
5	488	67.76	210.4		82.89
6	512	77.50	229.4		84.15
7	524	55.39	160.2		84.71
8	592	177.36	454.1		87.93
9	675	56.00	125.7		90.63
10	792	98.82	189.0		92.68
11	6,780	2.54	0.6		109.50
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,485	0.00	0.0		115.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-13\2017-12-13_005.xad

Created: 12/13/2017 3:23:26 PM
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