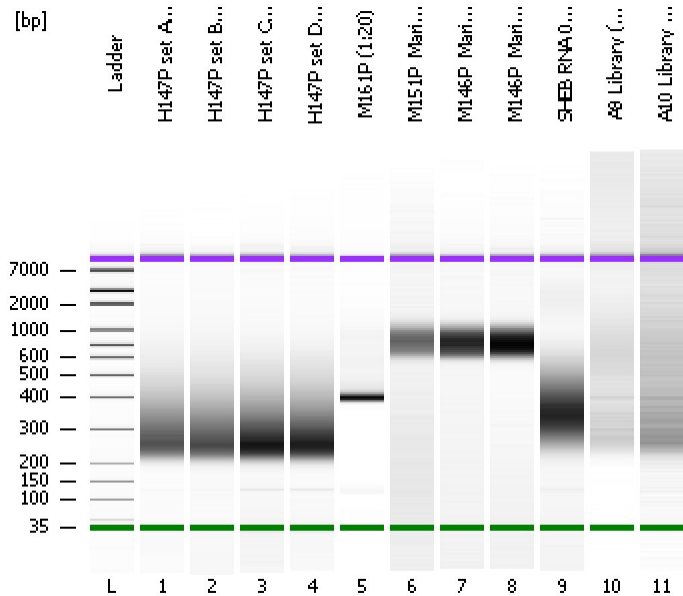


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
Modified: 7/15/2015 4:25:43 PM

Electrophoresis File Run Summary



Instrument Information:

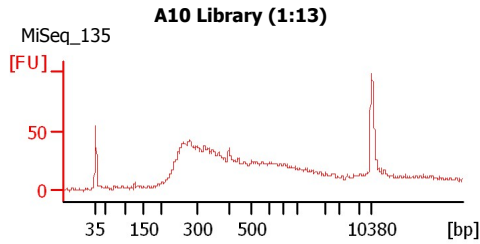
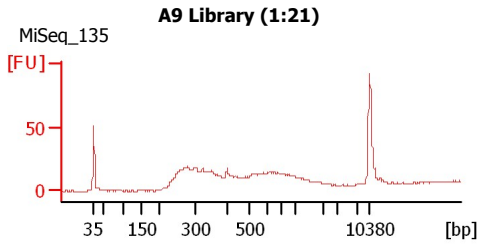
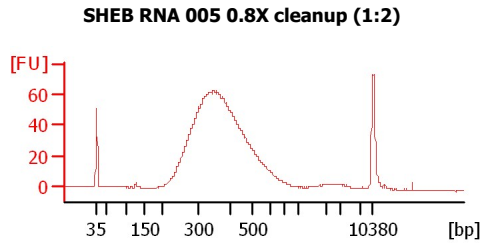
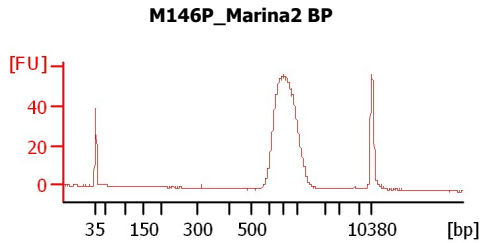
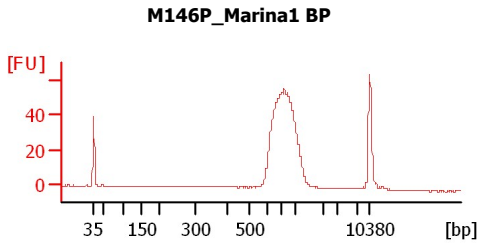
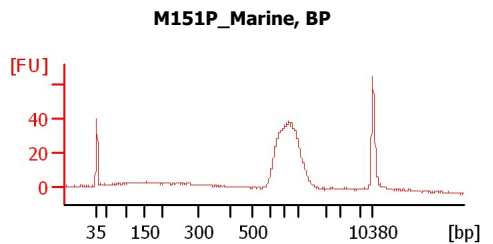
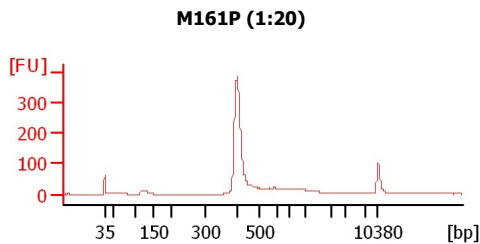
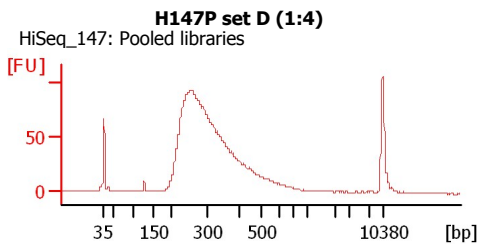
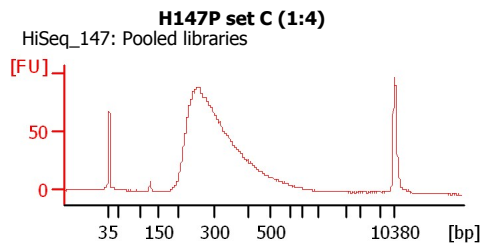
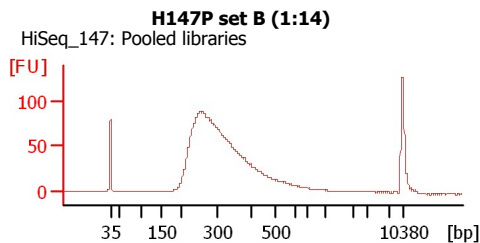
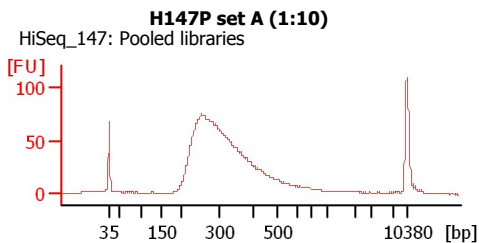
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
Modified: 7/15/2015 4:25:43 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
H147P set A (1:10)	HiSeq_147: Pooled libraries	<input type="checkbox"/>	✓			
H147P set B (1:14)	HiSeq_147: Pooled libraries	<input type="checkbox"/>	✓			
H147P set C (1:4)	HiSeq_147: Pooled libraries	<input type="checkbox"/>	✓			
H147P set D (1:4)	HiSeq_147: Pooled libraries	<input type="checkbox"/>	✓			
M161P (1:20)		<input type="checkbox"/>	✓			
M151P_Marine, BP		<input type="checkbox"/>	✓			
M146P_Marina1 BP		<input type="checkbox"/>	✓			
M146P_Marina2 BP		<input type="checkbox"/>	✓			
SHEB RNA 005 0.8X cleanup (1:2)		<input type="checkbox"/>	✓			
A9 Library (1:21)	MiSeq_135	<input type="checkbox"/>	✓			
A10 Library (1:13)	MiSeq_135	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
Modified: 7/15/2015 4:25:43 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

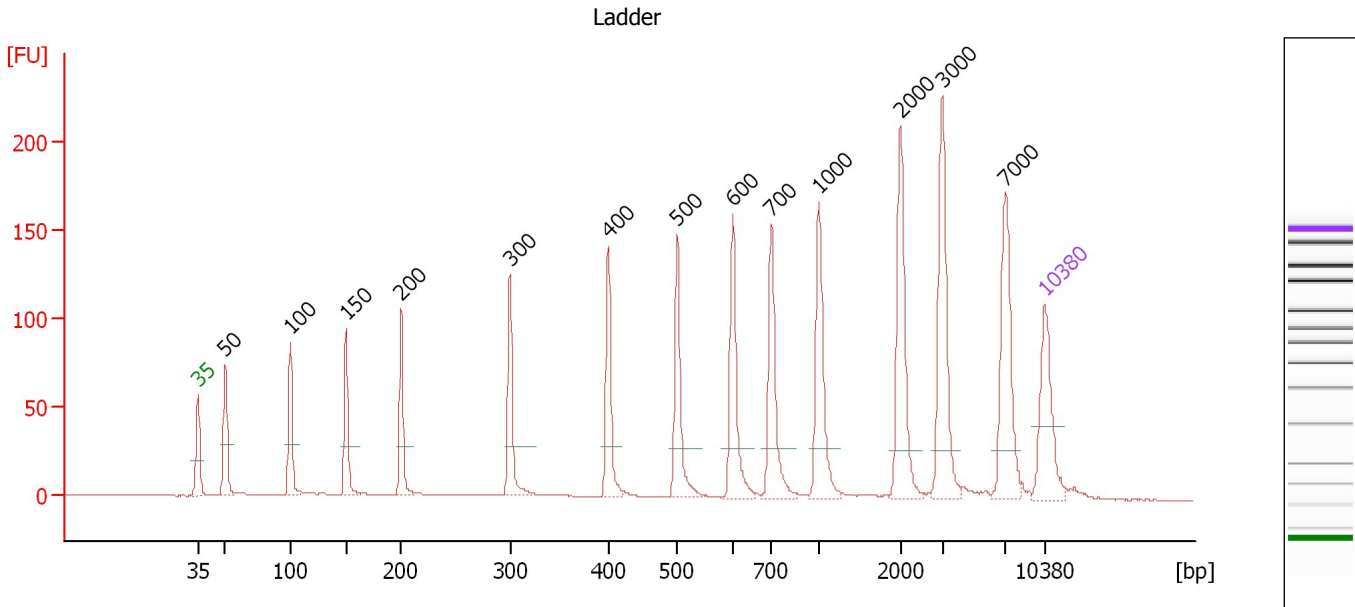
Ladder

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:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

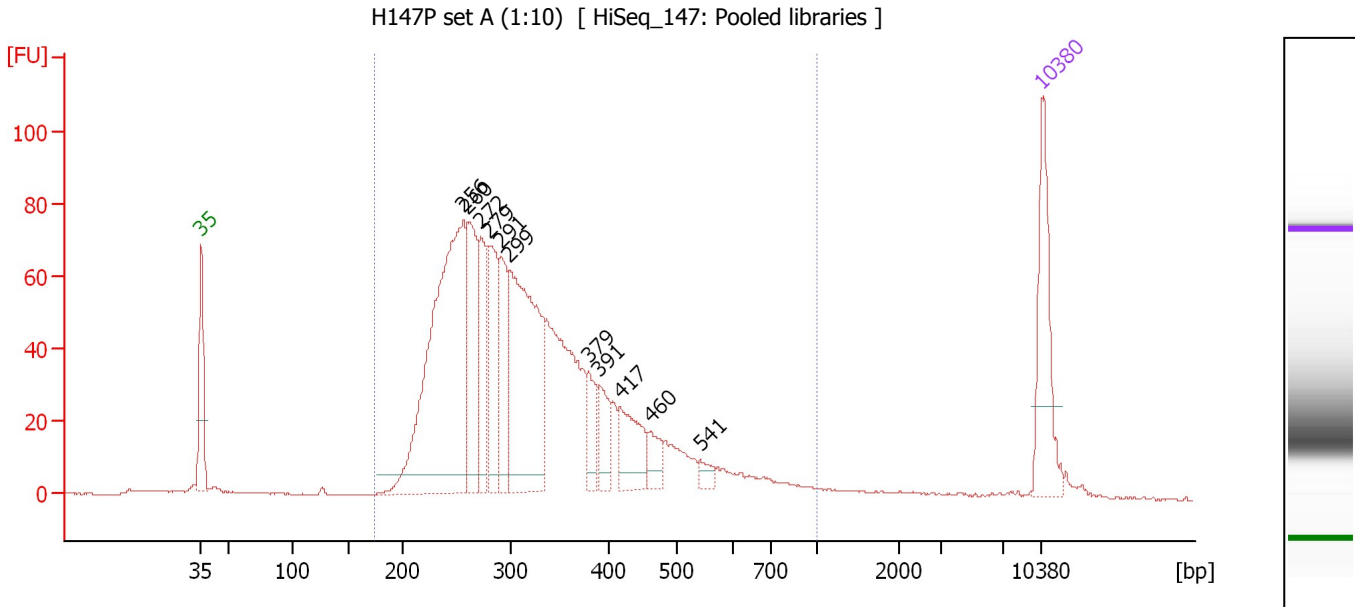
Peak table for Ladder

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	45.25
3	100	150.00	2,272.7	Ladder Peak	50.63
4	150	150.00	1,515.2	Ladder Peak	55.26
5	200	150.00	1,136.4	Ladder Peak	59.81
6	300	150.00	757.6	Ladder Peak	68.80
7	400	150.00	568.2	Ladder Peak	76.92
8	500	150.00	454.5	Ladder Peak	82.61
9	600	150.00	378.8	Ladder Peak	87.24
10	700	150.00	324.7	Ladder Peak	90.42
11	1,000	150.00	227.3	Ladder Peak	94.34
12	2,000	150.00	113.6	Ladder Peak	101.09
13	3,000	150.00	75.8	Ladder Peak	104.53
14	7,000	150.00	32.5	Ladder Peak	109.74
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : H147P set A (1:10)

Number of peaks found: 11 Corr. Area 1: 1,567.5
 Noise: 0.2

Peak table for sample 1 : H147P set A (1:10)

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	256	466.05	2,762.7		64.81
3	260	138.10	806.2		65.16
4	272	88.68	494.2		66.27
5	279	104.84	568.8		66.94
6	291	82.14	427.5		68.01
7	299	277.33	1,407.5		68.67
8	379	39.78	158.9		75.25
9	391	40.13	155.6		76.18
10	417	62.25	226.4		77.87
11	460	23.87	78.6		80.35
12	541	10.64	29.8		84.53
13	10,380	75.00	10.9	Upper Marker	113.00

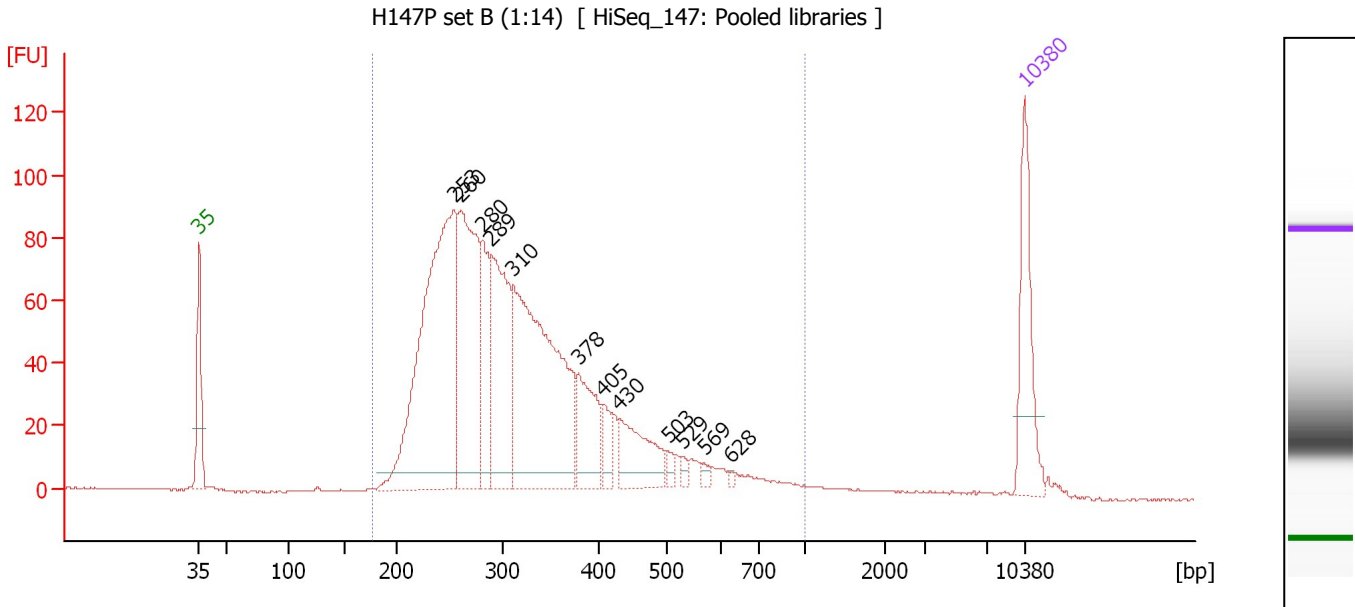
Region table for sample 1 : H147P set A (1:10)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
173	333	1,000	1,567.5	8,636.2	96	32.6	1,707.76

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : H147P set B (1:14)

Number of peaks found: 12 Corr. Area 1: 1,823.3
 Noise: 0.2

Peak table for sample 2 : H147P set B (1:14)

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	253	504.73	3,017.3		64.61
3	260	277.03	1,614.5		65.20
4	280	98.21	531.3		67.01
5	289	188.93	991.8		67.78
6	310	392.64	1,917.6		69.63
7	378	78.76	315.5		75.15
8	405	25.74	96.4		77.19
9	430	74.47	262.3		78.63
10	503	8.87	26.7		82.75
11	529	6.71	19.2		83.97
12	569	5.43	14.4		85.82
13	628	2.60	6.3		88.13
14	10,380	75.00	10.9	Upper Marker	113.00

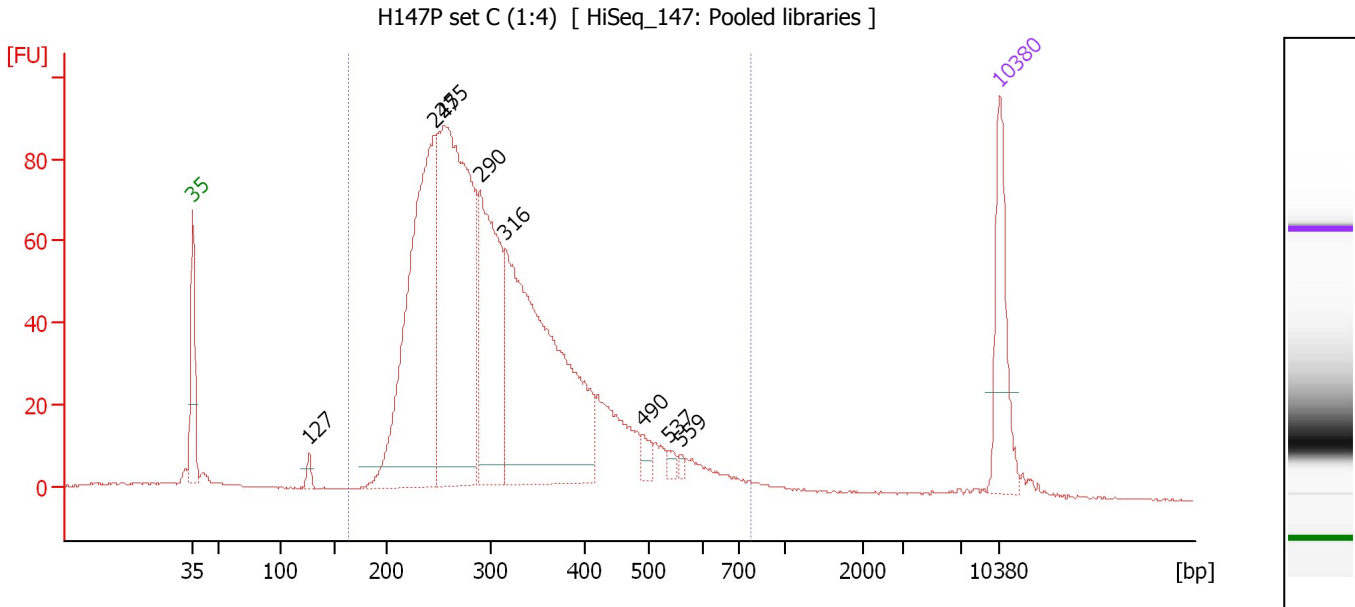
Region table for sample 2 : H147P set B (1:14)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
176	329	1,000	1,823.3	9,188.1	97	33.5	1,794.52

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : H147P set C (1:4)

Number of peaks found: 8 Corr. Area 1: 1,715.6
 Noise: 0.2

Peak table for sample 3 : H147P set C (1:4)

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	127	11.30	135.3		53.09
3	247	500.99	3,077.3		64.00
4	255	598.52	3,557.7		64.74
5	290	257.64	1,346.7		67.89
6	316	521.81	2,501.0		70.11
7	490	14.76	45.6		82.05
8	537	7.81	22.1		84.32
9	559	4.17	11.3		85.33
10	10,380	75.00	10.9	Upper Marker	113.00

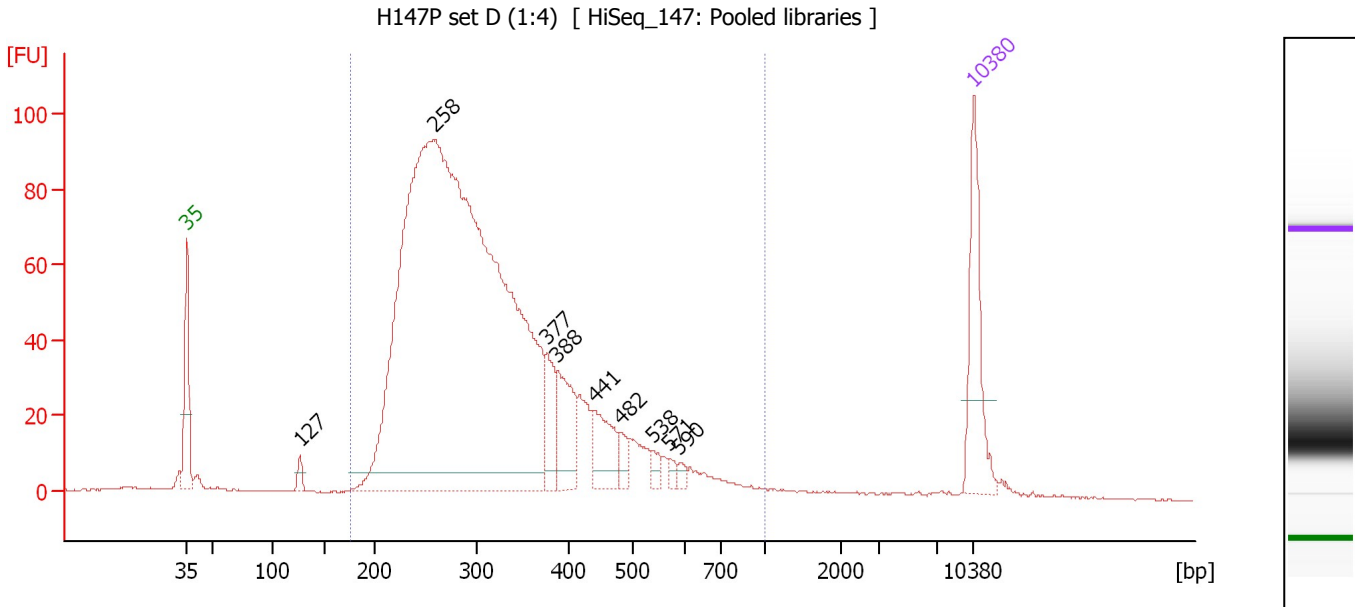
Region table for sample 3 : H147P set C (1:4)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
163	319	781	1,715.6	10,933.4	95	29.0	2,105.75

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : H147P set D (1:4)

Number of peaks found: 9 Corr. Area 1: 1,838.6
 Noise: 0.2

Peak table for sample 4 : H147P set D (1:4)

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	127	11.69	139.9		53.09
3	258	1,831.21	10,769.8		64.99
4	377	48.82	196.3		75.04
5	388	73.05	284.9		75.99
6	441	54.42	186.9		79.26
7	482	15.58	49.0		81.58
8	538	10.13	28.5		84.37
9	571	6.35	16.9		85.89
10	590	6.23	16.0		86.79
11	10,380	75.00	10.9	Upper Marker	113.00

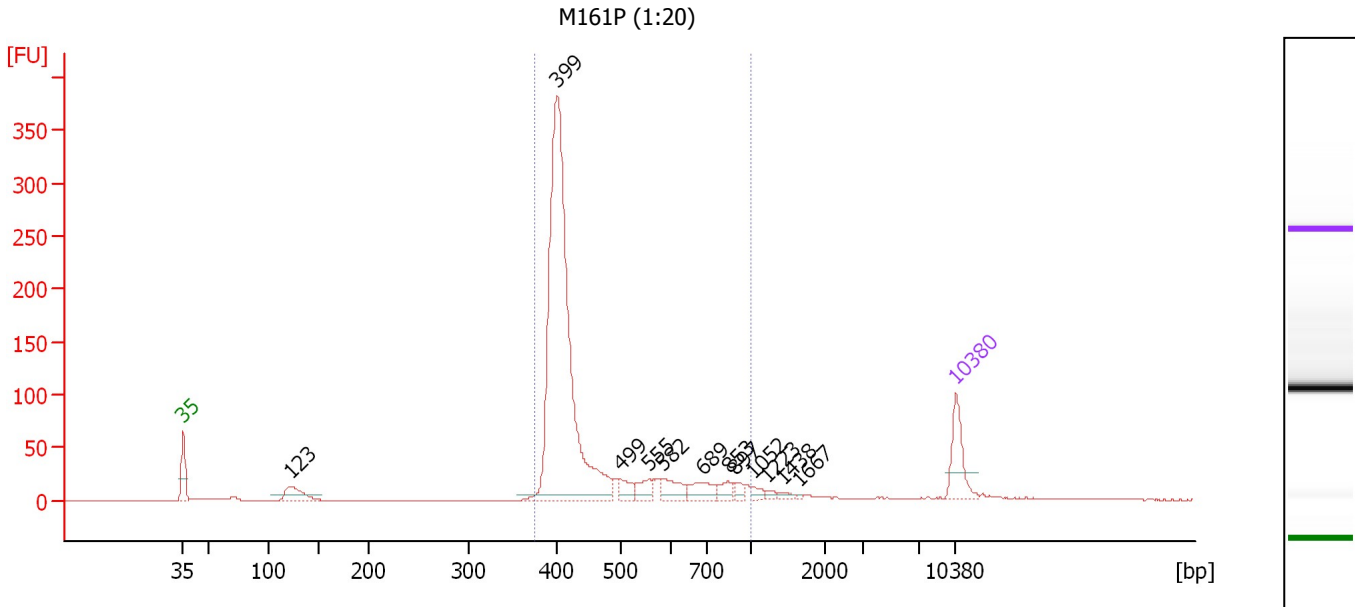
Region table for sample 4 : H147P set D (1:4)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
175	325	1,000	1,838.6	10,858.7	96	31.9	2,104.78

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : M161P (1:20)

Number of peaks found: 12 Corr. Area 1: 1,289.9
 Noise: 0.2

Peak table for sample 5 : M161P (1:20)

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	123	81.37	1,002.6		52.76
3	399	1,170.43	4,440.9		76.86
4	499	32.62	99.0		82.57
5	555	35.14	95.9		85.17
6	582	50.19	130.6		86.43
7	689	47.52	104.6		90.05
8	853	25.80	45.8		92.42
9	897	14.70	24.8		93.00
10	1,052	12.49	18.0		94.69
11	1,223	7.69	9.5		95.85
12	1,438	8.75	9.2		97.30
13	1,667	2.64	2.4		98.85
14	10,380	75.00	10.9	Upper Marker	113.00

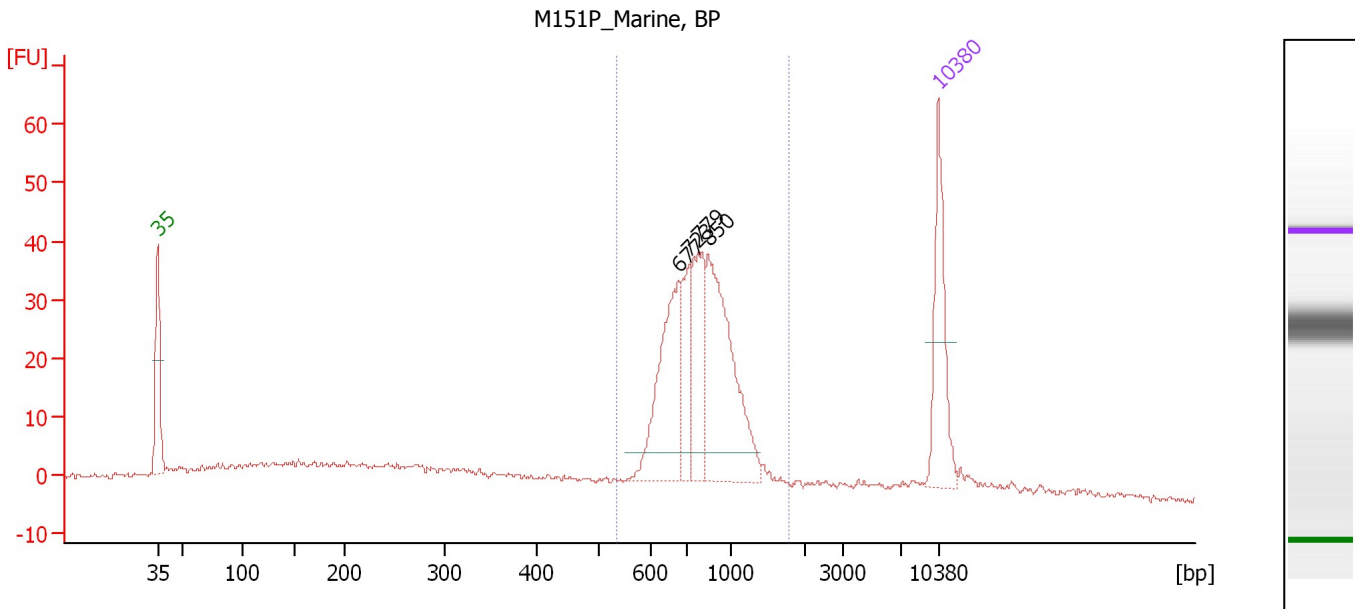
Region table for sample 5 : M161P (1:20)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
374	460	1,000	1,289.9	4,881.0	90	26.0	1,402.11

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : M151P Marine, BP

Number of peaks found: 4 Corr. Area 1: 313.2
 Noise: 0.5

Peak table for sample 6 : M151P Marine, BP

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	677	138.97	311.1		89.68
3	723	51.29	107.5		90.71
4	779	86.28	167.8		91.45
5	850	182.25	324.8		92.38
6	10,380	75.00	10.9	Upper Marker	113.00

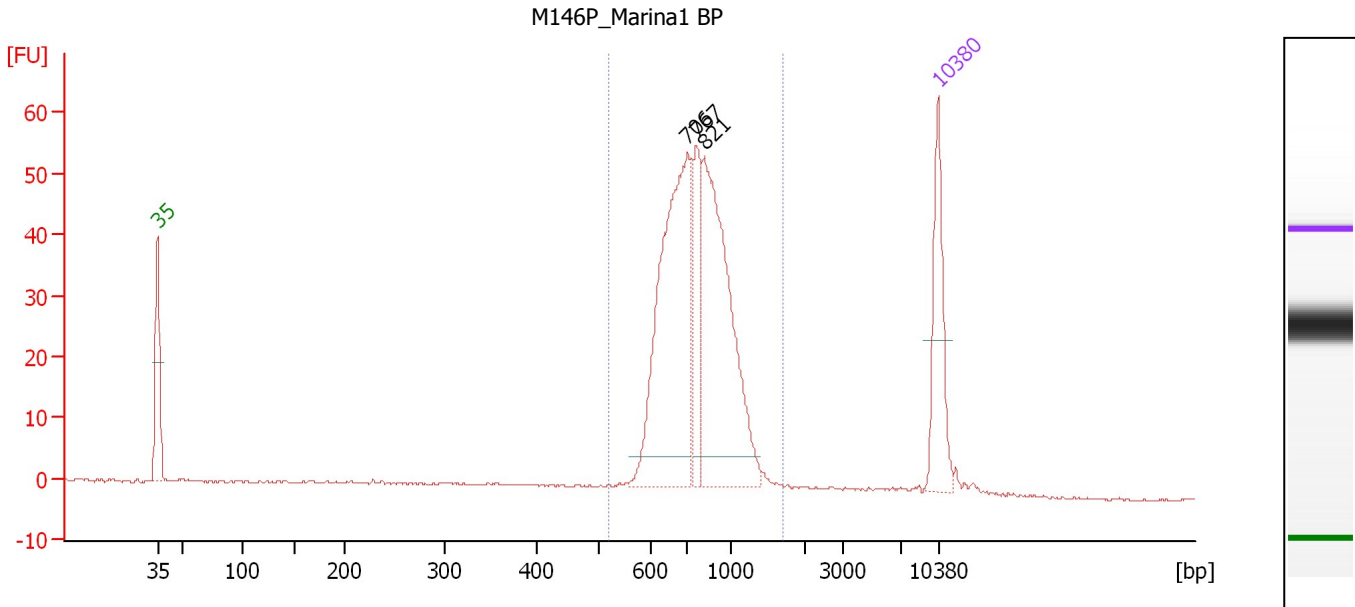
Region table for sample 6 : M151P Marine, BP

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
535	829	1,772	313.2	945.7	65	24.3	490.35

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : M146P_Marina1 BP

Number of peaks found: 3 Corr. Area 1: 426.0
 Noise: 0.2

Peak table for sample 7 : M146P_Marina1 BP

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	706	320.43	687.4		90.50
3	767	85.58	169.0		91.30
4	821	280.40	517.7		92.00
5	10,380	75.00	10.9	Upper Marker	113.00

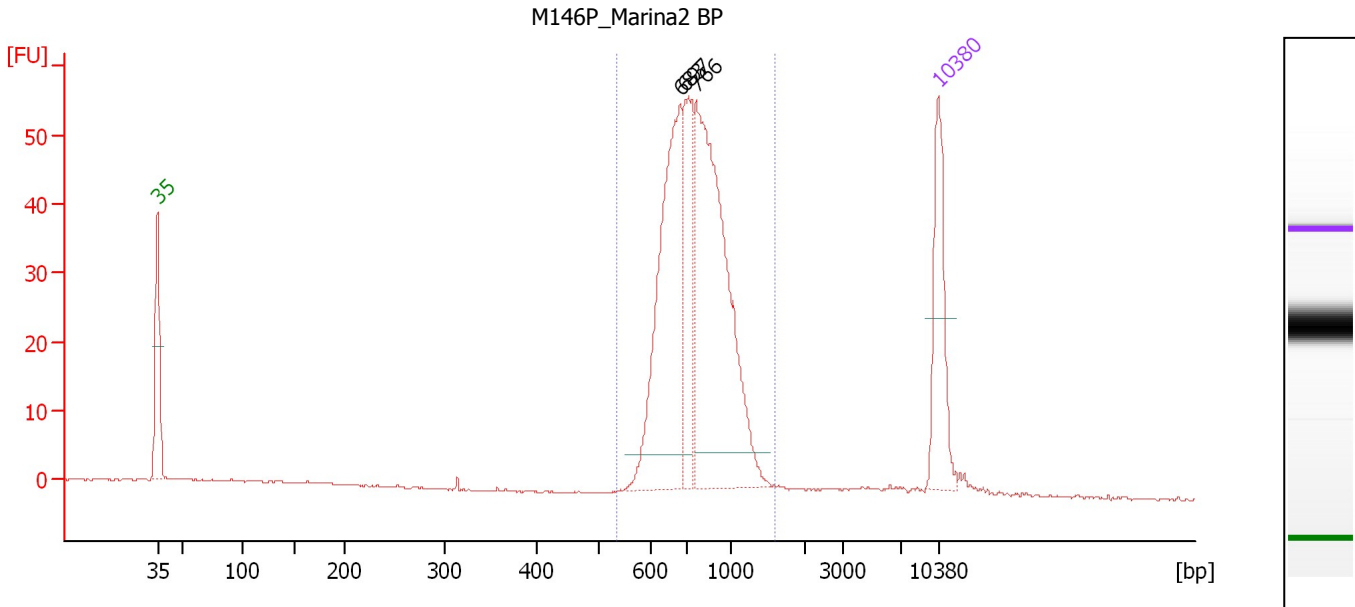
Region table for sample 7 : M146P_Marina1 BP

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
519	804	1,700	426.0	1,375.8	96	22.0	697.46

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : M146P_Marina2 BP

Number of peaks found: 3 Corr. Area 1: 419.9
 Noise: 0.1

Peak table for sample 8 : M146P_Marina2 BP

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	683	261.03	579.3		89.87
3	697	106.08	230.6		90.32
4	766	348.22	688.8		91.28
5	10,380	75.00	10.9	Upper Marker	113.00

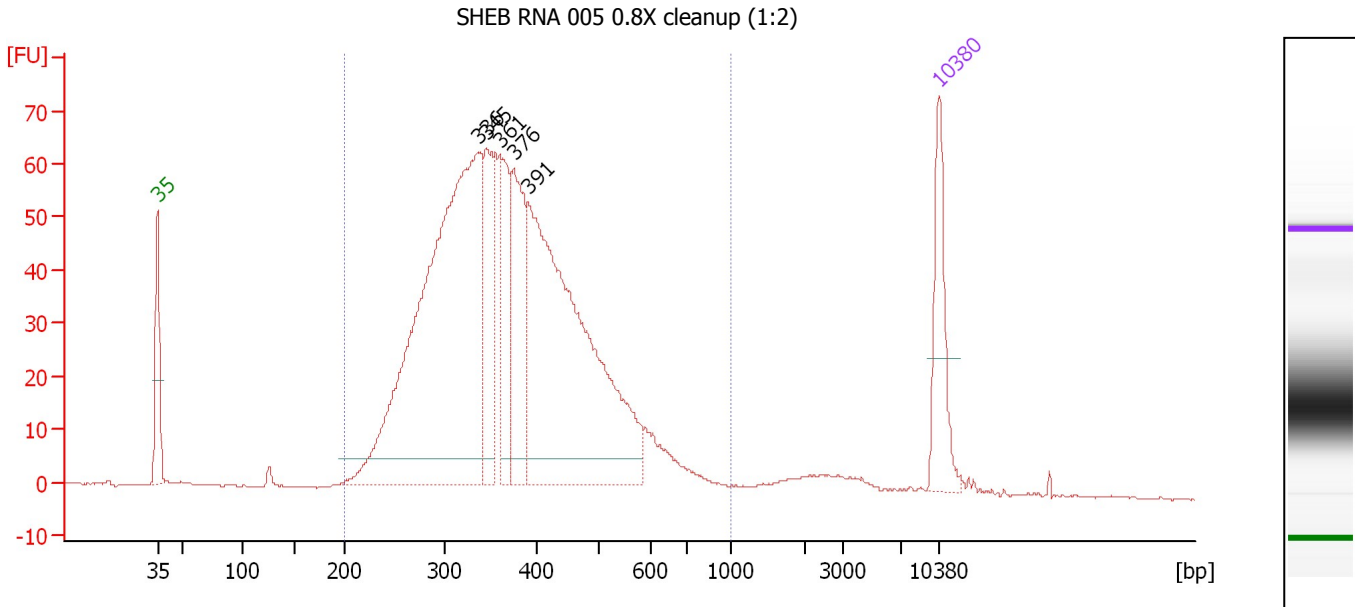
Region table for sample 8 : M146P_Marina2 BP

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
534	795	1,600	419.9	1,406.2	94	21.0	708.17

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : SHEB RNA 005 0.8X cleanup (1:2)

Number of peaks found: 5 Corr. Area 1: 1,349.1
 Noise: 0.1

Peak table for sample 9 : SHEB RNA 005 0.8X cleanup (1:2)

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	336	843.49	3,798.6		71.76
3	345	152.04	668.6		72.42
4	361	122.26	513.4		73.74
5	376	162.56	655.4		74.96
6	391	614.58	2,378.8		76.22
7	10,380	75.00	10.9	Upper Marker	113.00

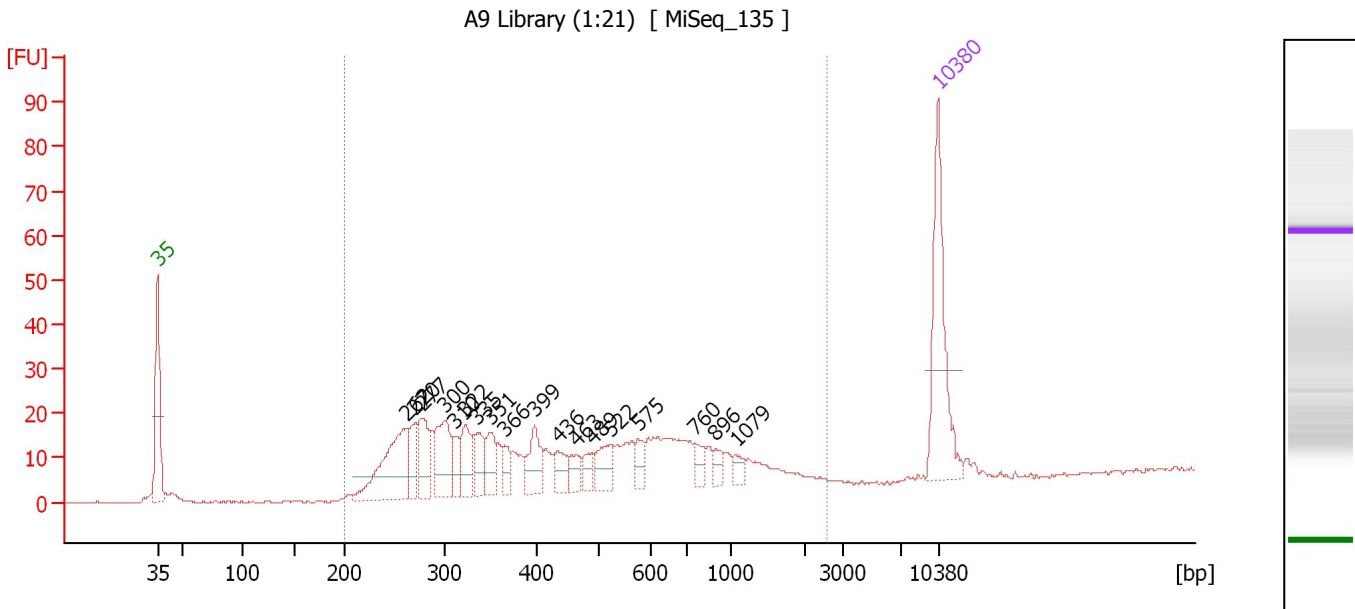
Region table for sample 9 : SHEB RNA 005 0.8X cleanup (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	382	1,000	1,349.1	9,098.0	96	26.2	2,111.55

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : A9 Library (1:21)

Number of peaks found: 18 Corr. Area 1: 445.4
 Noise: 0.2

Peak table for sample 10 : A9 Library (1:21)

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	262	93.81	541.8		65.41
3	270	25.91	145.5		66.08
4	277	39.18	214.2		66.74
5	300	52.57	265.7		68.78
6	310	17.71	86.6		69.60
7	322	30.27	142.3		70.62
8	335	24.77	112.1		71.64
9	351	25.45	110.0		72.92
10	366	12.18	50.5		74.15
11	399	29.56	112.2		76.85
12	436	17.50	60.9		78.94
13	463	13.39	43.8		80.53
14	489	12.82	39.7		82.01
15	522	23.57	68.4		83.64
16	575	12.53	33.0		86.09
17	760	11.89	23.7		91.20
18	896	8.06	13.6		92.99
19	1,079	7.58	10.6		94.87
20	10,380	75.00	10.9	Upper Marker	113.00

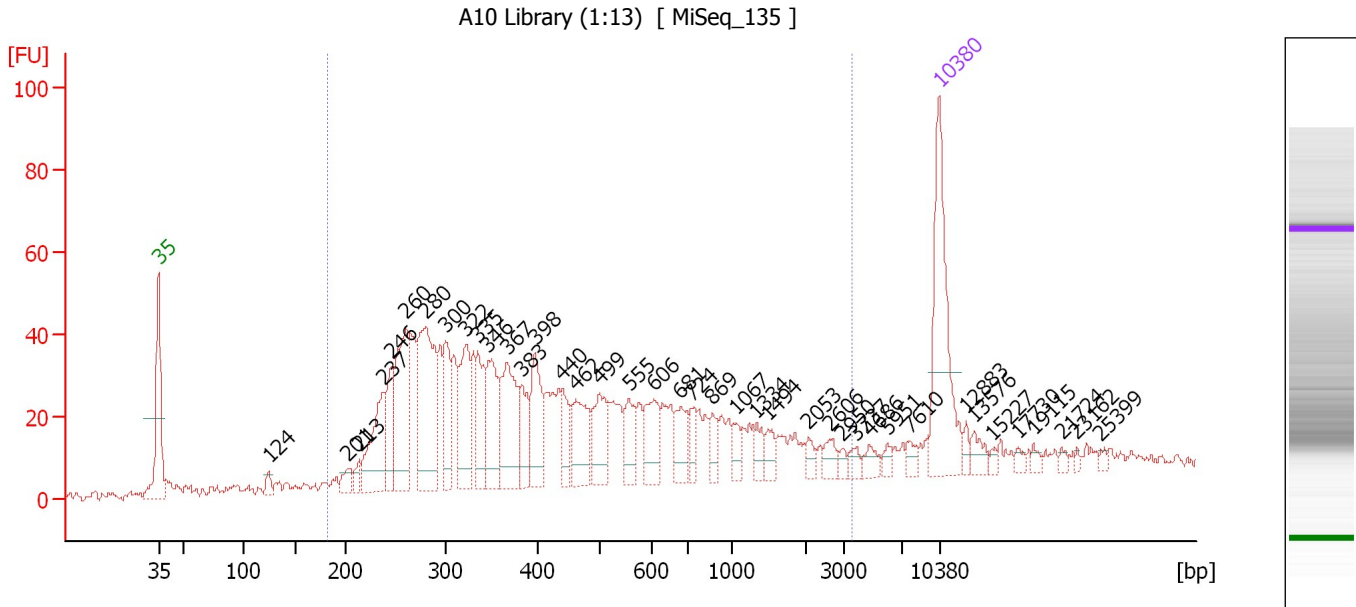
Region table for sample 10 : A9 Library (1:21)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	509	2,584	445.4	2,316.0	98	60.0	572.44

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 11 : A10 Library (1:13)

Number of peaks found: 40 Corr. Area 1: 1,169.3
 Noise: 1.5

Peak table for sample 11 : A10 Library (1:13)

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	124	7.70	93.9		52.88
3	201	11.44	86.1		59.92
4	213	8.45	60.0		61.00
5	237	62.17	397.9		63.11
6	246	36.50	224.9		63.93
7	260	86.53	505.1		65.17
8	280	113.87	617.1		66.97
9	300	39.53	199.9		68.77
10	322	55.36	260.2		70.62
11	335	37.35	168.9		71.65
12	346	51.89	226.9		72.57
13	367	64.79	267.7		74.22
14	383	26.75	105.8		75.56
15	398	45.50	173.3		76.74
16	440	19.28	66.4		79.21
17	462	38.88	127.5		80.44
18	499	35.68	108.3		82.55
19	555	23.55	64.3		85.17
20	606	29.32	73.3		87.44
21	681	21.40	47.6		89.80
22	724	11.96	25.0		90.73
23	869	11.97	20.9		92.63
24	1,067	8.89	12.6		94.79
25	1,334	9.74	11.1		96.59

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

Created: 7/15/2015 3:43:51 PM
 Modified: 7/15/2015 4:25:43 PM

Electropherogram Summary Continued ...

... Peak table for sample 11 : A10 Library (1:13)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,494	8.88	9.0		97.67
27	2,053	6.05	4.5		101.27
28	2,606	7.99	4.6		103.18
29	2,950	3.75	1.9		104.36
30	3,737	5.54	2.2		105.49
31	4,686	6.81	2.2		106.73
32	5,951	4.33	1.1		108.37
33	7,610	5.68	1.1		110.33
34	10,380	75.00	10.9	Upper Marker	113.00
35	12,883	0.00	0.0		115.42
36	13,576	0.00	0.0		116.09
37	15,227	0.00	0.0		117.68
38	17,730	0.00	0.0		120.10
39	19,115	0.00	0.0		121.43
40	21,724	0.00	0.0		123.96
41	23,162	0.00	0.0		125.34
42	25,399	0.00	0.0		127.50

Region table for sample 11 : A10 Library (1:13)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
182	580	3,527	1,169.3	4,913.9	87	88.2	1,182.32

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-15\2015-07-15_002.xad

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Gel Image

