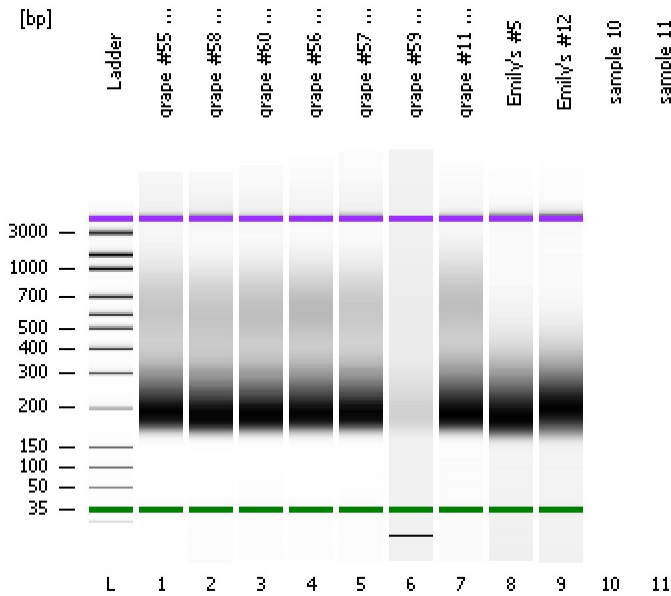


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/24/2014 10:58:48 AM

Electrophoresis File Run Summary



Instrument Information:

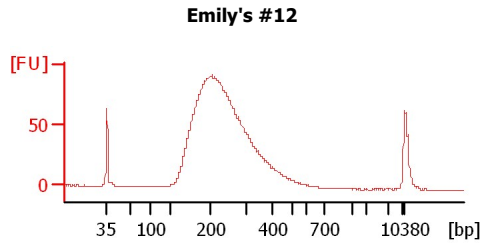
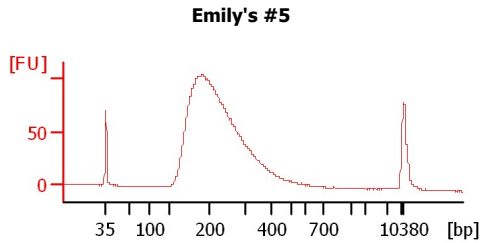
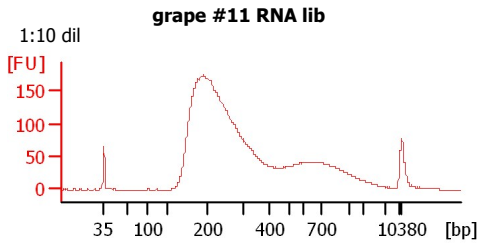
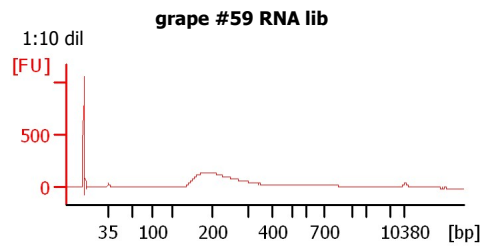
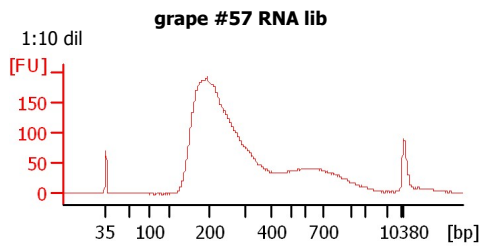
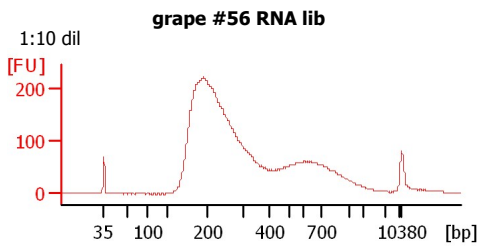
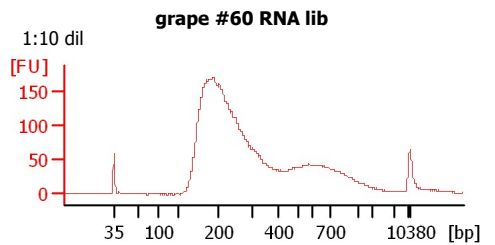
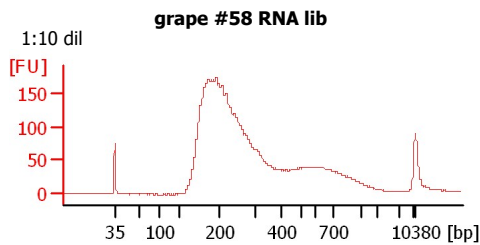
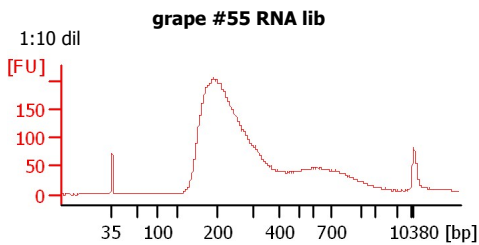
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/24/2014 10:58:48 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
grape #55 RNA lib	1:10 dil	<input type="checkbox"/>	✓			
grape #58 RNA lib	1:10 dil	<input type="checkbox"/>	✓			
grape #60 RNA lib	1:10 dil	<input type="checkbox"/>	✓			
grape #56 RNA lib	1:10 dil	<input type="checkbox"/>	✓			
grape #57 RNA lib	1:10 dil	<input type="checkbox"/>	✓			
grape #59 RNA lib	1:10 dil	<input type="checkbox"/>	✓			
grape #11 RNA lib	1:10 dil	<input type="checkbox"/>	✓			
Emily's #5		<input type="checkbox"/>	✓			
Emily's #12		<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: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/24/2014 10:58:48 AM

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

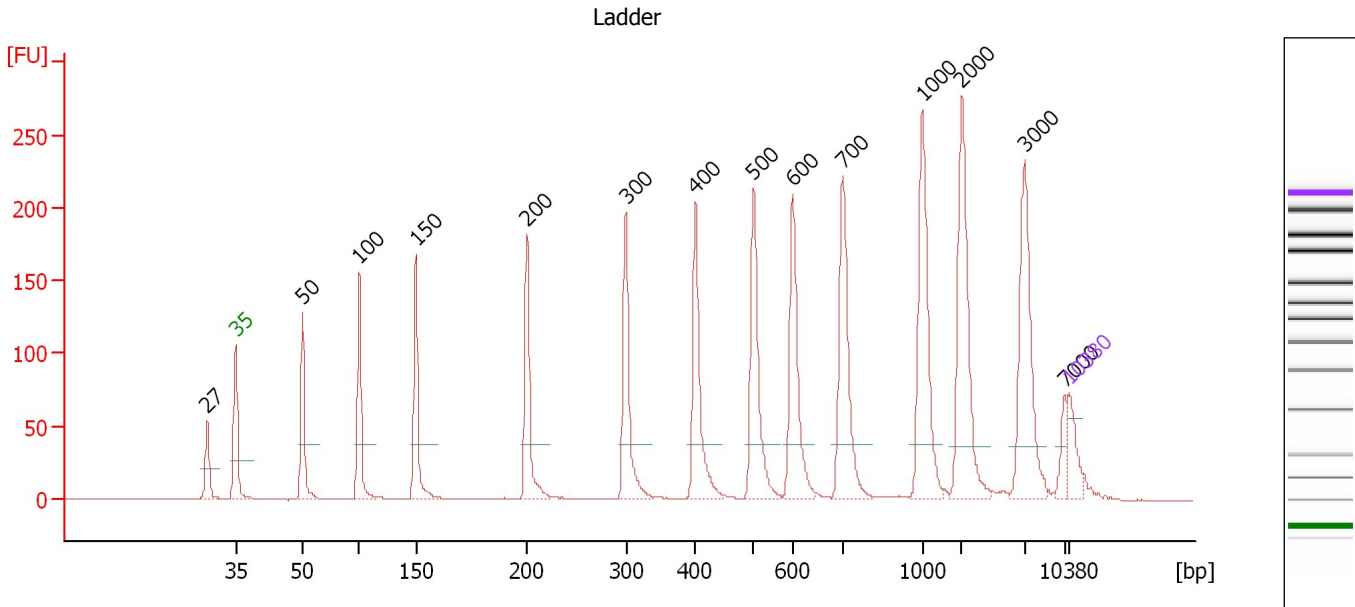
Ladder

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\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

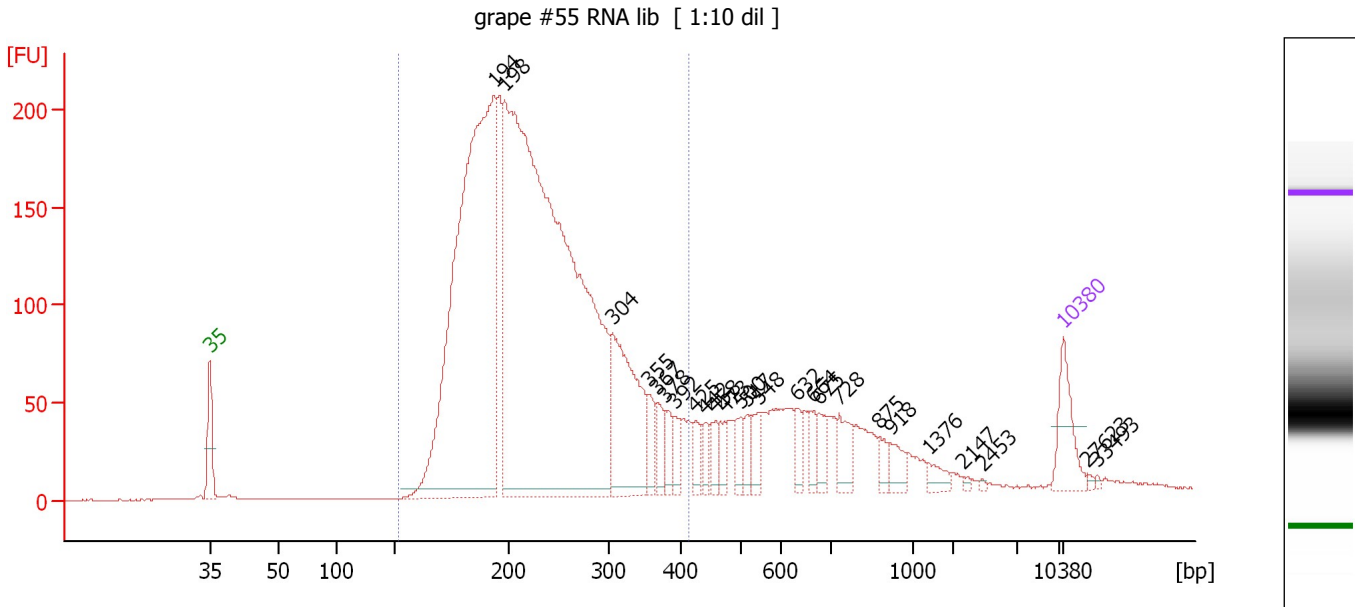
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	27	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	50	150.00	4,545.5	Ladder Peak
4	100	150.00	2,272.7	Ladder Peak
5	150	150.00	1,515.2	Ladder Peak
6	200	150.00	1,136.4	Ladder Peak
7	300	150.00	757.6	Ladder Peak
8	400	150.00	568.2	Ladder Peak
9	500	150.00	454.5	Ladder Peak
10	600	150.00	378.8	Ladder Peak
11	700	150.00	324.7	Ladder Peak
12	1,000	150.00	227.3	Ladder Peak
13	2,000	150.00	113.6	Ladder Peak
14	3,000	150.00	75.8	Ladder Peak
15	7,000	150.00	32.5	Ladder Peak
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
 Modified: 11/24/2014 10:58:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : grape #55 RNA lib

Number of peaks found: 25 Corr. Area 1: 3,698.9
 Noise: 0.2

Peak table for sample 1 : grape #55 RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	194	1,834.08	14,329.0	
3	198	2,885.67	22,040.1	
4	304	364.23	1,814.0	
5	355	57.23	244.3	
6	367	47.79	197.4	
7	378	46.23	185.3	
8	392	34.28	132.4	
9	425	40.55	144.7	
10	442	32.47	111.4	
11	458	37.22	123.2	
12	473	34.80	111.4	
13	500	38.22	115.8	
14	517	31.44	92.1	
15	548	42.61	117.8	
16	632	34.76	83.3	
17	664	38.14	87.1	
18	675	43.18	96.9	
19	728	61.98	129.1	
20	875	25.71	44.5	
21	918	35.08	57.9	
22	1,376	22.83	25.1	
23	2,147	4.72	3.3	
24	2,453	2.71	1.7	
25	10,380	75.00	10.9	Upper Marker
26	27,623	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/24/2014 10:58:48 AM

Electropherogram Summary Continued ...**... Peak table for sample 1 : grape #55 RNA lib**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	33,493	0.00	0.0	

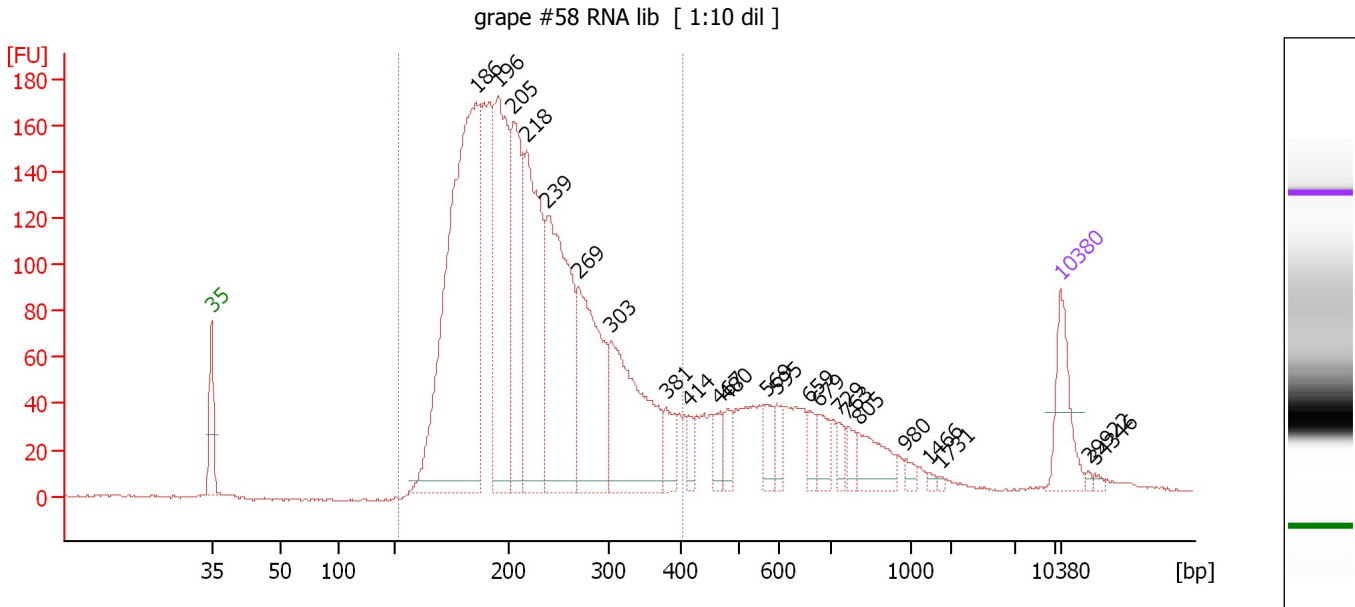
Region table for sample 1 : grape #55 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
152	236	413	3,698.9	81	24.3	5,304.48	36,436.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
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Electropherogram Summary Continued ...



Overall Results for sample 2 : grape #58 RNA lib

Number of peaks found: 23 Corr. Area 1: 3,162.6
 Noise: 0.6

Peak table for sample 2 : grape #58 RNA lib


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	186	1,138.88	9,283.6	
3	196	490.09	3,798.2	
4	205	324.67	2,403.2	
5	218	440.44	3,061.6	
6	239	503.15	3,194.2	
7	269	342.02	1,923.3	
8	303	346.03	1,732.8	
9	381	49.43	196.8	
10	414	25.88	94.6	
11	467	31.63	102.7	
12	480	34.31	108.3	
13	569	40.22	107.2	
14	595	31.62	80.5	
15	659	28.77	66.1	
16	679	37.79	84.3	
17	729	18.54	38.5	
18	763	22.72	45.1	
19	805	67.21	126.6	
20	980	11.24	17.4	
21	1,466	4.60	4.8	
22	1,731	2.46	2.2	
23	10,380	75.00	10.9	Upper Marker
24	29,922	0.00	0.0	
25	34,346	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/24/2014 10:58:48 AM

Electropherogram Summary Continued ...

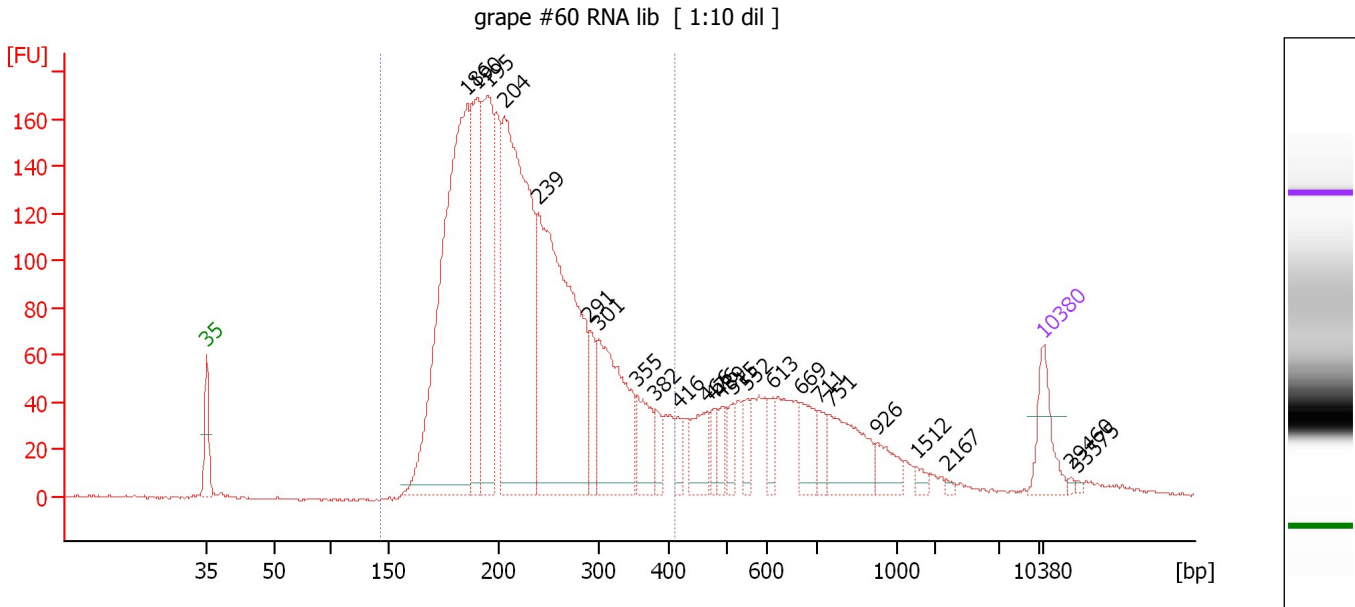
... Region table for sample 2 : grape #58 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
151	231	406	3,162.6	81	24.5	4,018.87	28,216.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
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Electropherogram Summary Continued ...



Overall Results for sample 3 : grape #60 RNA lib

Number of peaks found: 24 Corr. Area 1: 3,081.5
 Noise: 0.4

Peak table for sample 3 : grape #60 RNA lib


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	186	1,299.52	10,604.3	
3	190	421.21	3,363.7	
4	195	513.29	3,988.8	
5	204	1,090.14	8,086.6	
6	239	1,029.17	6,517.5	
7	291	85.72	446.4	
8	301	378.07	1,903.7	
9	355	112.85	481.8	
10	382	45.52	180.8	
11	416	33.07	120.4	
12	466	93.48	304.3	
13	476	34.90	111.0	
14	489	35.55	110.1	
15	515	38.35	112.7	
16	552	41.33	113.4	
17	613	34.20	84.6	
18	669	81.99	185.7	
19	711	39.92	85.0	
20	751	155.62	313.8	
21	926	51.44	84.2	
22	1,512	12.88	12.9	
23	2,167	4.53	3.2	
24	10,380	75.00	10.9	Upper Marker
25	29,460	0.00	0.0	
26	33,575	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/24/2014 10:58:48 AM

Electropherogram Summary Continued ...

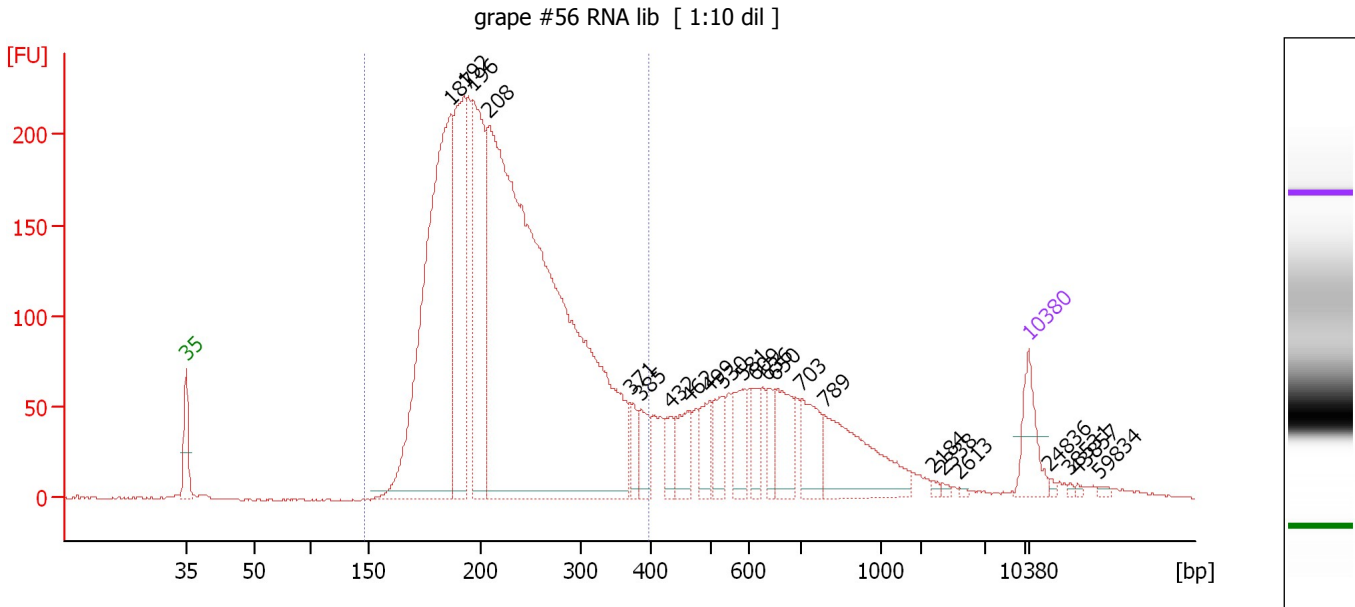
... Region table for sample 3 : grape #60 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
144	233	412	3,081.5	79	24.8	5,252.11	36,529.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
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Electropherogram Summary Continued ...



Overall Results for sample 4 : grape #56 RNA lib

Number of peaks found: 23 Corr. Area 1: 3,952.2
 Noise: 0.5

Peak table for sample 4 : grape #56 RNA lib


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	187	1,344.79	10,901.1	
3	192	539.78	4,248.8	
4	196	561.56	4,333.0	
5	208	3,072.77	22,360.3	
6	371	52.59	215.0	
7	385	69.64	273.8	
8	432	51.29	180.1	
9	462	92.70	303.8	
10	499	78.47	238.5	
11	530	77.63	222.0	
12	581	84.24	219.6	
13	609	51.71	128.6	
14	636	41.78	99.5	
15	650	114.53	267.0	
16	703	108.60	234.0	
17	789	243.46	467.6	
18	2,184	5.54	3.8	
19	2,338	4.79	3.1	
20	2,613	3.58	2.1	
21	10,380	75.00	10.9	Upper Marker
22	24,836	0.00	0.0	
23	38,531	0.00	0.0	
24	43,857	0.00	0.0	
25	59,834	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/24/2014 10:58:48 AM

Electropherogram Summary Continued ...

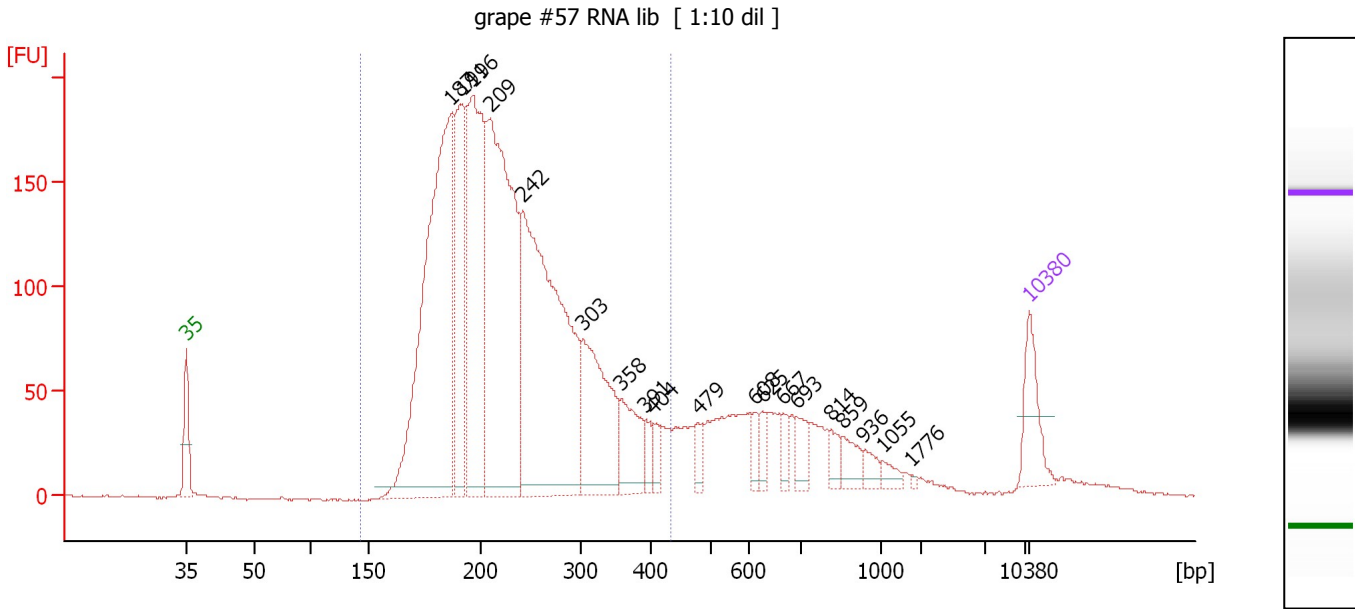
... Region table for sample 4 : grape #56 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
146	233	396	3,952.2	76	23.6	5,521.59	38,218.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
 Modified: 11/24/2014 10:58:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : grape #57 RNA lib

Number of peaks found: 19 Corr. Area 1: 3,417.9
 Noise: 0.6

Peak table for sample 5 : grape #57 RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	187	1,111.67	9,019.6	
3	191	397.37	3,145.5	
4	196	646.26	4,987.7	
5	209	949.43	6,868.8	
6	242	1,006.06	6,309.2	
7	303	322.94	1,615.3	
8	358	124.99	529.3	
9	391	33.07	128.0	
10	404	31.39	117.8	
11	479	33.61	106.3	
12	608	27.61	68.8	
13	625	25.73	62.4	
14	667	26.63	60.4	
15	693	44.44	97.2	
16	814	26.10	48.6	
17	859	39.39	69.5	
18	936	23.41	37.9	
19	1,055	18.38	26.4	
20	1,776	2.85	2.4	
21	10,380	75.00	10.9	Upper Marker

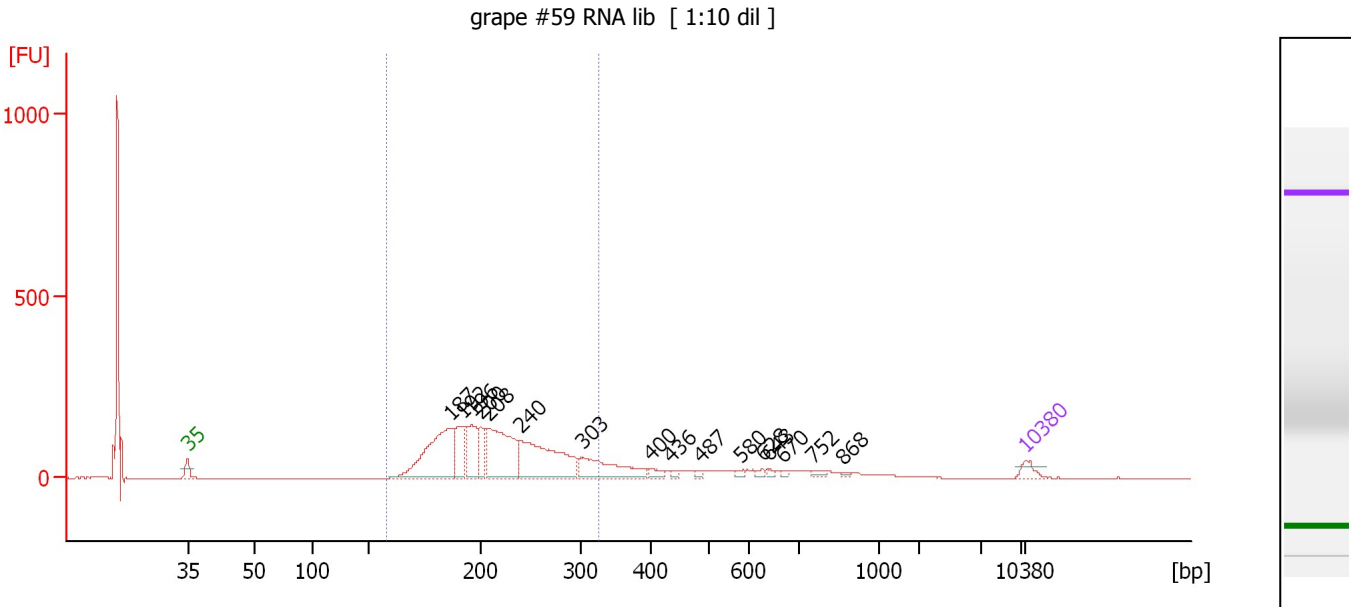
Region table for sample 5 : grape #57 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
144	237	431	3,417.9	82	25.5	4,613.40	31,716.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
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Electropherogram Summary Continued ...



Overall Results for sample 6 : grape #59 RNA lib

Number of peaks found: 16 Corr. Area 1: 2,318.9
 Noise: 0.5

Peak table for sample 6 : grape #59 RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	187	1,421.67	11,527.0	
3	192	472.65	3,738.5	
4	196	539.40	4,169.7	
5	200	303.77	2,301.8	
6	208	1,194.90	8,693.5	
7	240	1,285.62	8,114.9	
8	303	628.84	3,147.2	
9	400	77.75	294.2	
10	436	32.32	112.2	
11	487	36.45	113.5	
12	580	41.83	109.2	
13	628	31.65	76.4	
14	643	27.72	65.3	
15	670	24.79	56.0	
16	752	40.79	82.2	
17	868	19.54	34.1	
18	10,380	75.00	10.9	Upper Marker

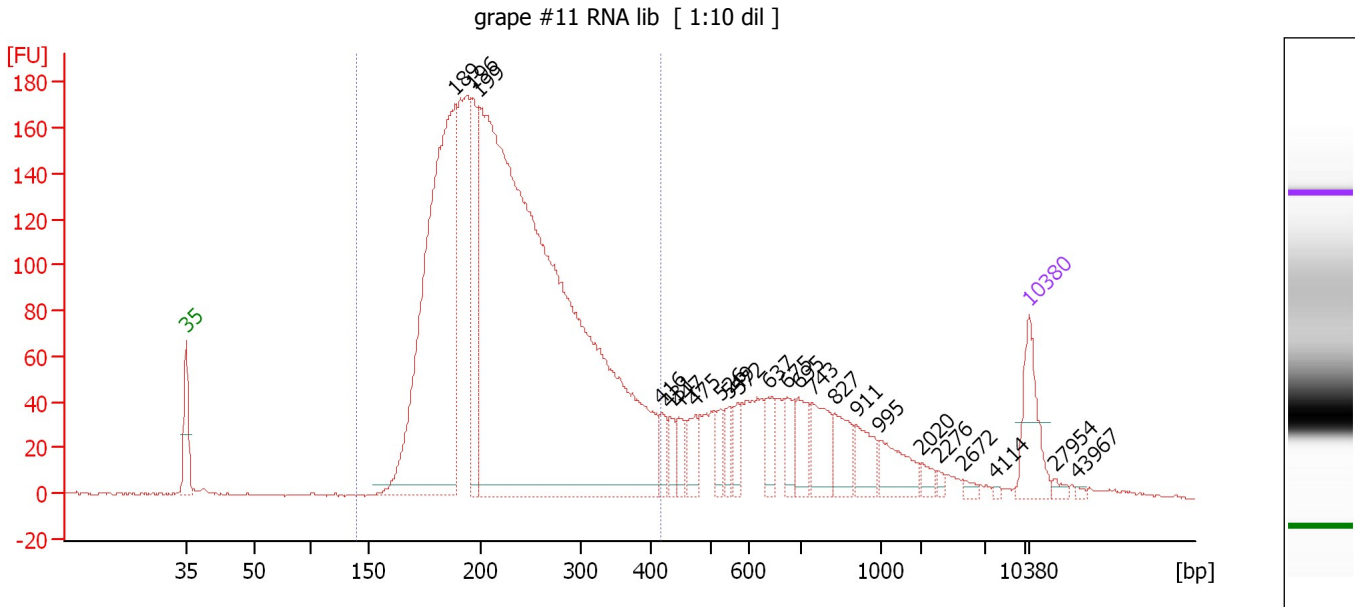
Region table for sample 6 : grape #59 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
158	222	327	2,318.9	63	18.2	5,513.69	39,108.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
 Modified: 11/24/2014 10:58:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : grape #11 RNA lib

Number of peaks found: 23 Corr. Area 1: 3,252.3
 Noise: 0.5

Peak table for sample 7 : grape #11 RNA lib


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	189	1,137.17	9,137.8	
3	196	219.83	1,697.1	
4	199	2,889.61	22,000.5	
5	416	33.43	121.7	
6	431	31.71	111.6	
7	447	35.24	119.5	
8	475	43.39	138.5	
9	526	30.24	87.1	
10	549	28.12	77.6	
11	572	32.64	86.5	
12	637	40.47	96.3	
13	675	40.07	89.9	
14	695	56.66	123.5	
15	743	78.61	160.2	
16	827	60.53	110.9	
17	911	52.66	87.6	
18	995	61.24	93.3	
19	2,020	13.21	9.9	
20	2,276	5.24	3.5	
21	2,672	6.71	3.8	
22	4,114	2.63	1.0	
23	10,380	75.00	10.9	Upper Marker
24	27,954	0.00	0.0	
25	43,967	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
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Electropherogram Summary Continued ...

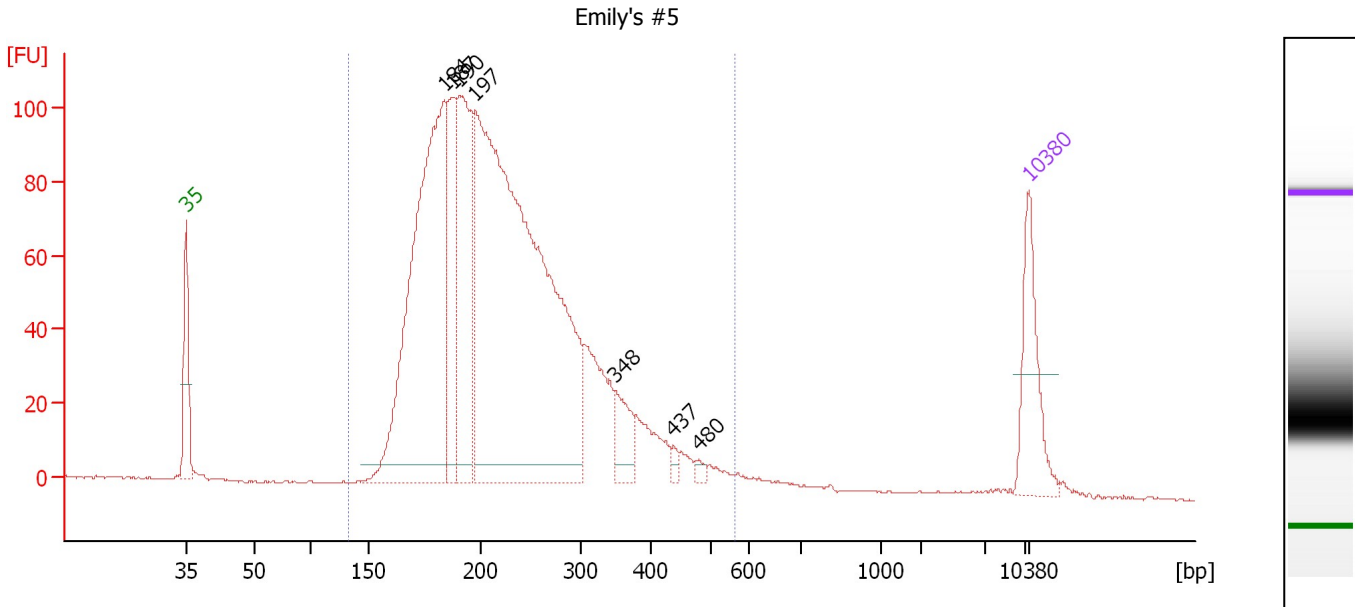
... Region table for sample 7 : grape #11 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
139	237	415	3,252.3	78	25.0	4,305.84	29,504.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 8 : Emily's #5

Number of peaks found: 7 Corr. Area 1: 2,087.4
 Noise: 0.2

Peak table for sample 8 : Emily's #5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	184	676.27	5,576.9	
3	187	149.31	1,208.3	
4	190	301.20	2,399.3	
5	197	1,220.46	9,366.1	
6	348	51.46	224.2	
7	437	8.12	28.1	
8	480	6.41	20.2	
9	10,380	75.00	10.9	Upper Marker

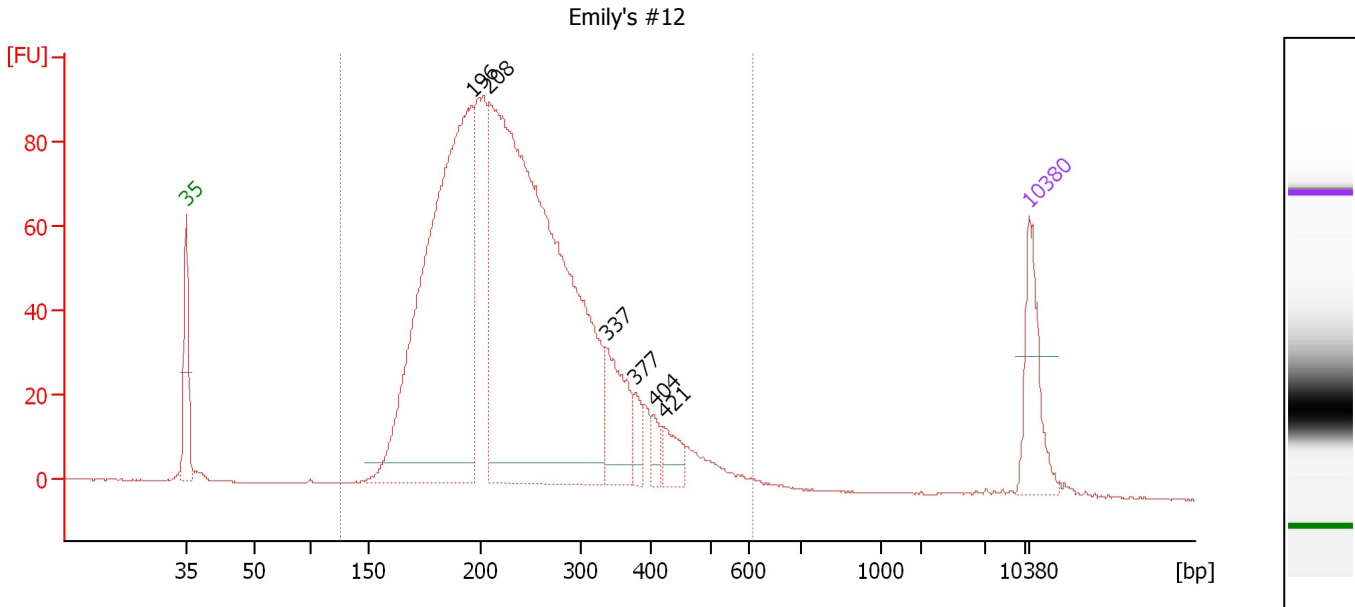
Region table for sample 8 : Emily's #5

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
132	237	564	2,087.4	98	30.5	2,604.87	18,323.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
 Modified: 11/24/2014 10:58:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Emily's #12

Number of peaks found: 6 Corr. Area 1: 1,892.2
 Noise: 0.1

Peak table for sample 9 : Emily's #12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	196	1,039.22	8,036.1	
3	208	1,506.33	10,958.3	
4	337	113.26	509.9	
5	377	29.90	120.1	
6	404	20.28	76.1	
7	421	36.16	130.1	
8	10,380	75.00	10.9	Upper Marker

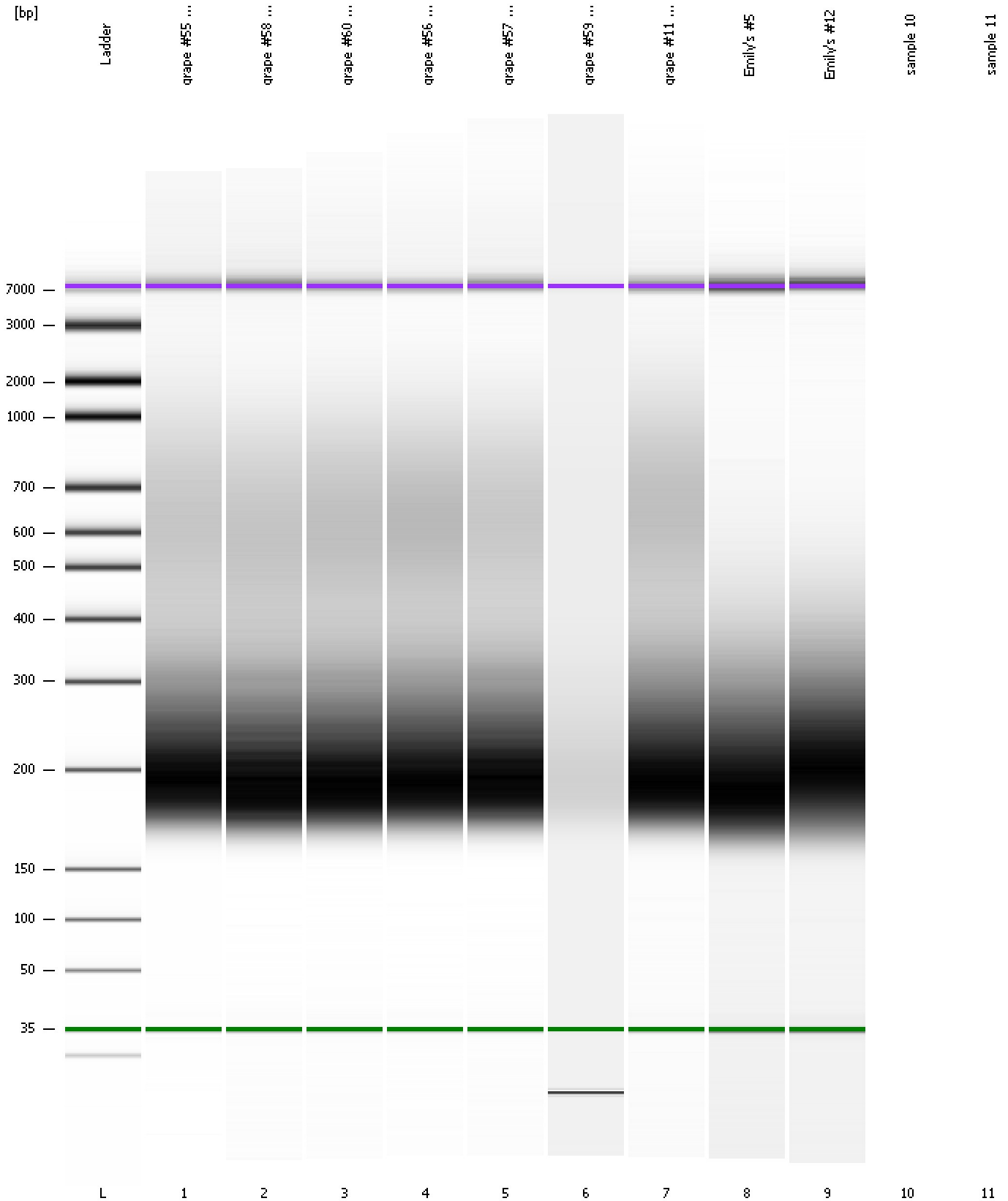
Region table for sample 9 : Emily's #12

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
125	248	608	1,892.2	98	31.1	3,043.99	20,543.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/24/2014 10:58:48 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/24/2014 10:58:48 AM

Invalid Samples

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
 Modified: 11/24/2014 10:58:48 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		11/24/2014 10:58:10 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad)		Instrument	Run		11/24/2014 10:22:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/24/2014 10:22:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/24/2014 10:22:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/24/2014 10:22:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/24/2014 10:22:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/24/2014 10:22:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/24/2014 10:22:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1