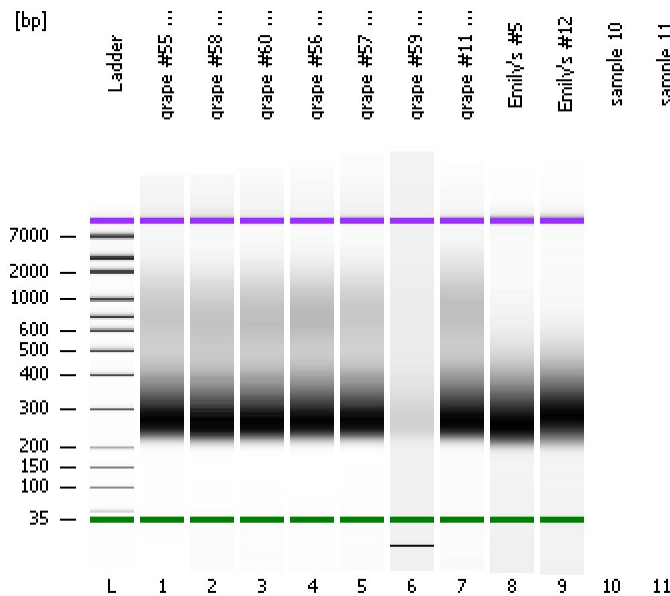


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-24\2014-11-24_001.xad

Created: 11/24/2014 10:22:34 AM
Modified: 11/25/2014 3:13:43 PM

Electrophoresis File Run Summary



Instrument Information:

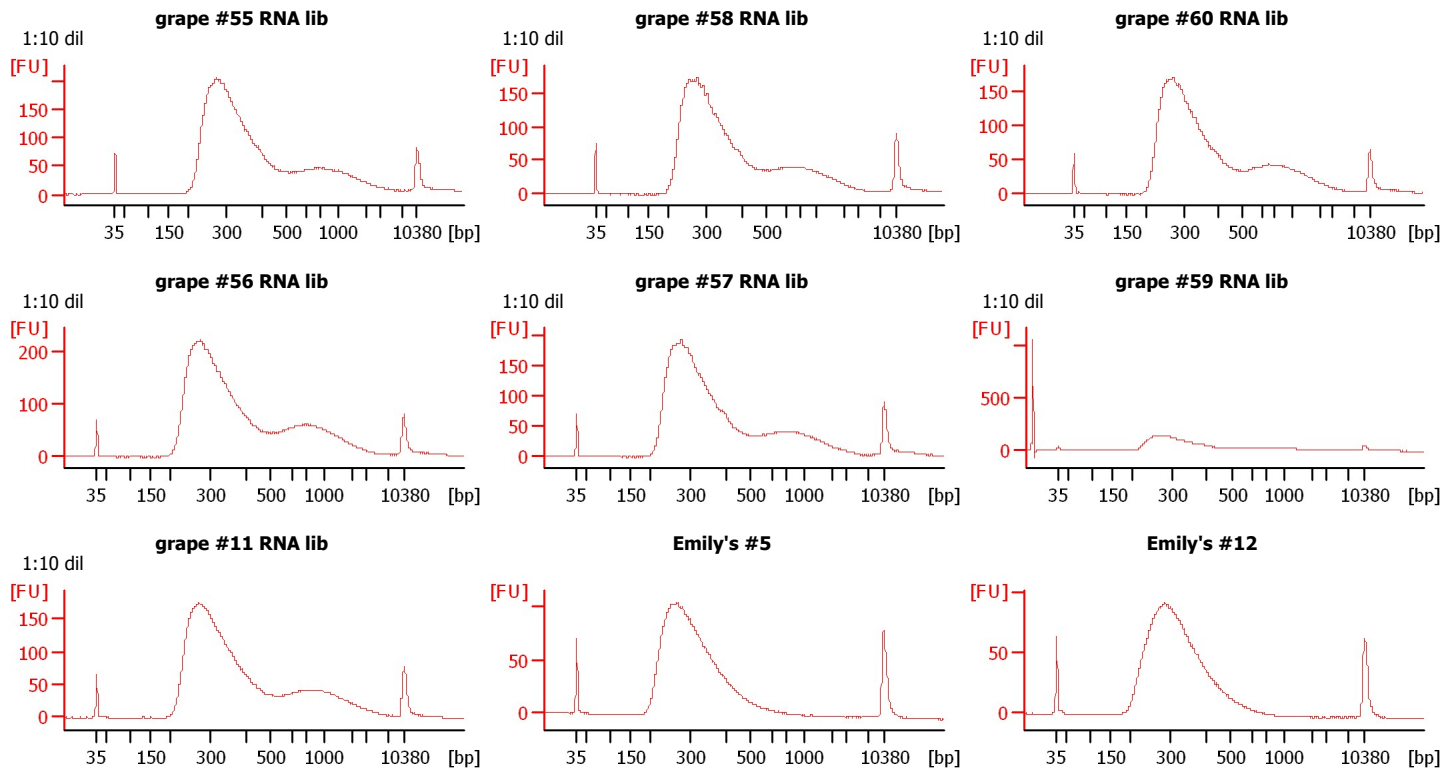
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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

Created: 11/24/2014 10:22:34 AM
Modified: 11/25/2014 3:13:43 PM

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: 11/25/2014 3:13:43 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

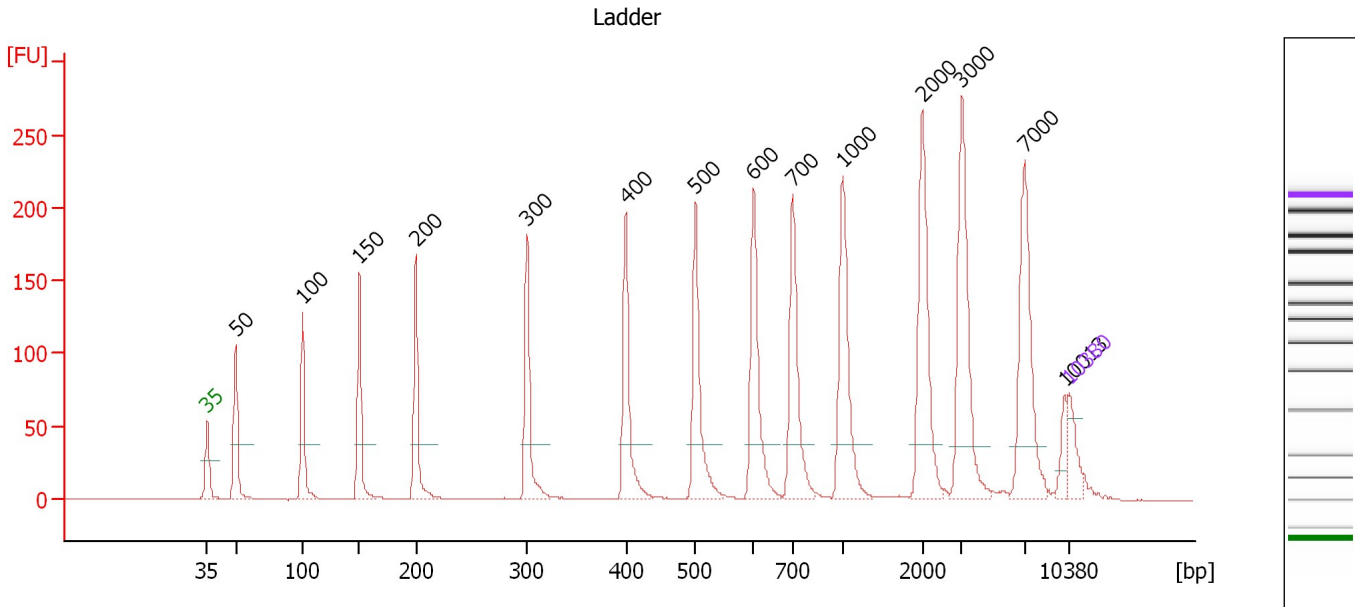
Ladder

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

Created: 11/24/2014 10:22:34 AM
 Modified: 11/25/2014 3:13:43 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

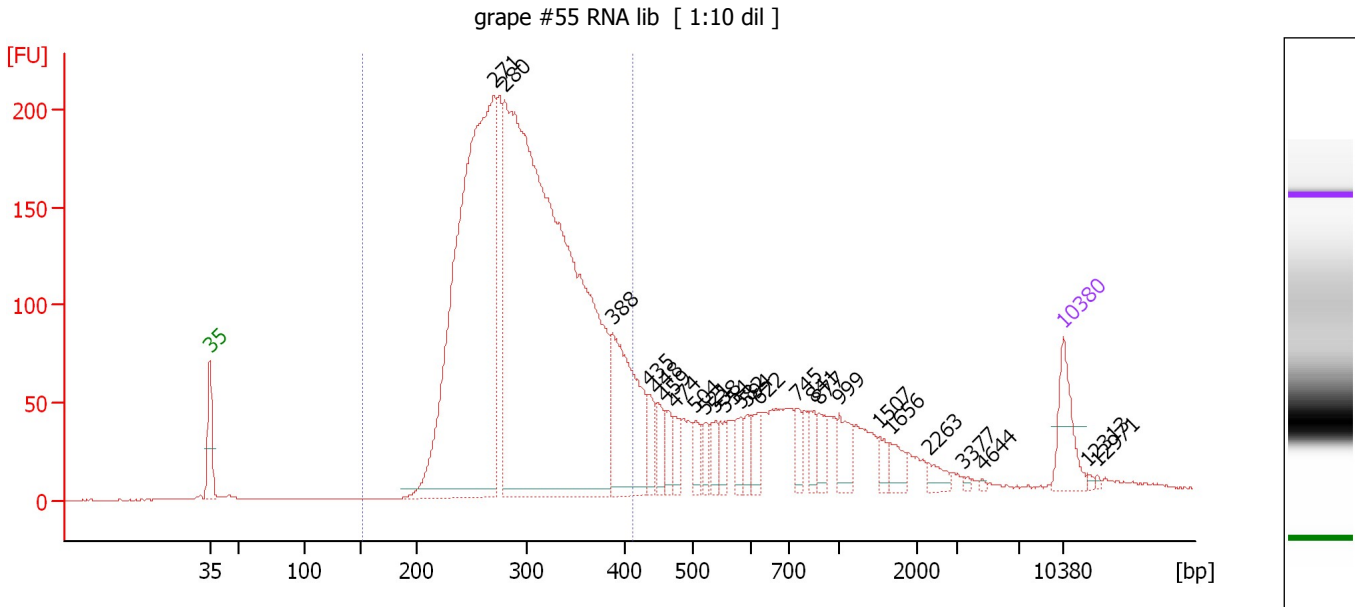
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
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	10,013	0.00	0.0	
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: 11/25/2014 3:13:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : grape #55 RNA lib

Number of peaks found: 25 Corr. Area 1: 3,428.6
 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	271	1,676.84	9,375.9	
3	280	2,632.59	14,237.6	
4	388	329.14	1,285.8	
5	435	54.21	188.7	
6	448	45.89	155.3	
7	459	44.94	148.3	
8	474	33.85	108.3	
9	504	40.25	121.1	
10	521	31.71	92.2	
11	538	35.81	100.8	
12	554	33.02	90.3	
13	582	35.40	92.2	
14	594	29.30	74.8	
15	622	41.06	100.0	
16	745	35.14	71.5	
17	841	36.41	65.6	
18	877	40.37	69.8	
19	999	55.12	83.6	
20	1,507	22.91	23.0	
21	1,656	31.28	28.6	
22	2,263	21.22	14.2	
23	3,377	4.75	2.1	
24	4,644	2.74	0.9	
25	10,380	75.00	10.9	Upper Marker
26	12,313	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: 11/25/2014 3:13:43 PM

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

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	12,971	0.00	0.0	

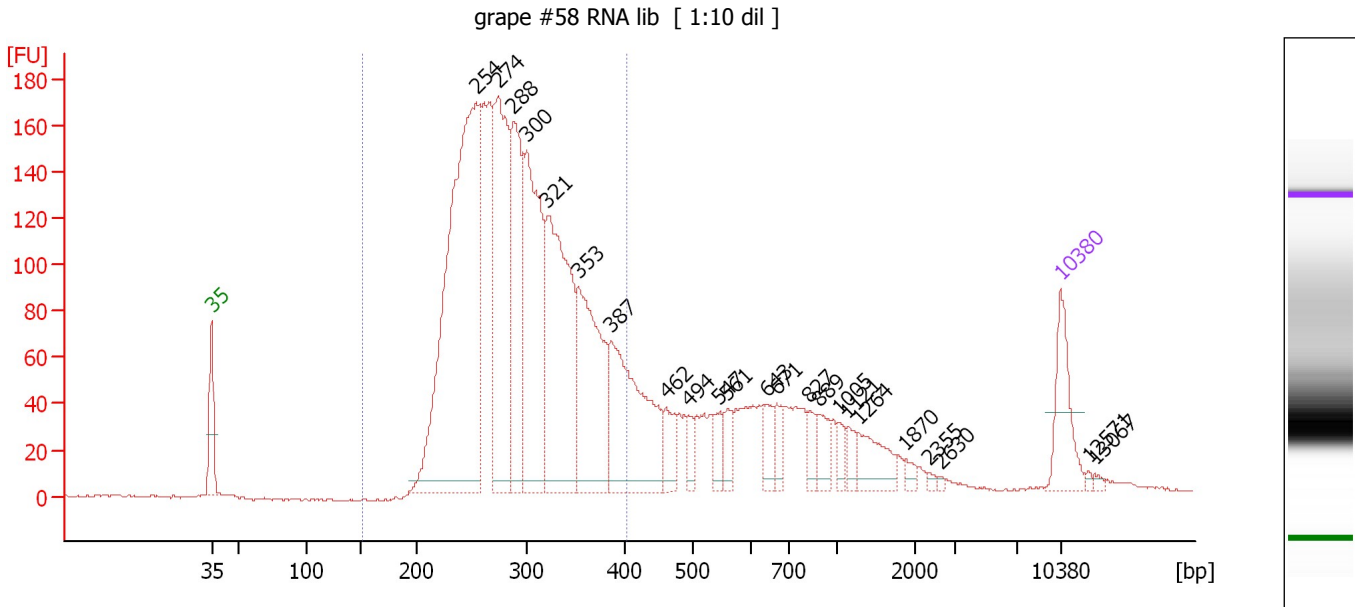
Region table for sample 1 : grape #55 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
152	300	413	3,428.6	75	16.2	4,544.65	23,656.2	

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
 Modified: 11/25/2014 3:13:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : grape #58 RNA lib

Number of peaks found: 23 Corr. Area 1: 2,925.9
 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	254	1,045.42	6,228.7	
3	274	447.73	2,473.9	
4	288	296.23	1,559.5	
5	300	402.86	2,034.9	
6	321	458.49	2,161.8	
7	353	310.02	1,330.0	
8	387	312.47	1,224.5	
9	462	48.18	158.1	
10	494	25.78	79.0	
11	547	30.19	83.6	
12	561	32.34	87.3	
13	643	39.88	93.9	
14	671	32.54	73.4	
15	827	27.69	50.7	
16	889	35.09	59.8	
17	1,005	16.48	24.9	
18	1,121	20.21	27.3	
19	1,264	59.83	71.7	
20	1,870	10.03	8.1	
21	2,355	4.33	2.8	
22	2,630	2.39	1.4	
23	10,380	75.00	10.9	Upper Marker
24	12,571	0.00	0.0	
25	13,067	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: 11/25/2014 3:13:43 PM

Electropherogram Summary Continued ...

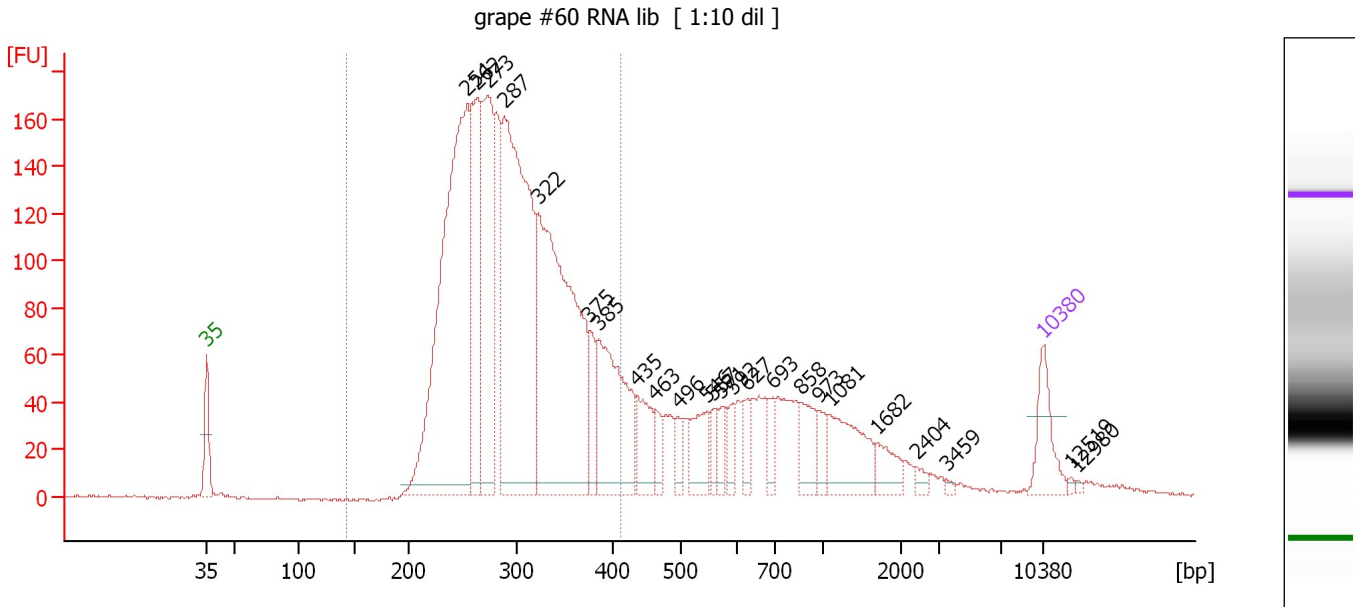
... Region table for sample 2 : grape #58 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
151	294	406	2,925.9	75	16.5	3,439.96	18,318.6	

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: 2,852.9
 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	254	1,192.99	7,119.2	
3	262	385.90	2,229.3	
4	273	469.04	2,602.1	
5	287	994.56	5,243.1	
6	322	937.73	4,412.9	
7	375	77.43	312.5	
8	385	341.16	1,341.1	
9	435	106.88	372.1	
10	463	44.42	145.4	
11	496	32.94	100.7	
12	546	89.31	247.9	
13	557	33.01	89.8	
14	571	33.24	88.3	
15	592	35.71	91.4	
16	627	40.05	96.9	
17	693	35.49	77.6	
18	858	77.52	137.0	
19	973	35.62	55.5	
20	1,081	138.43	194.1	
21	1,682	45.87	41.3	
22	2,404	12.18	7.7	
23	3,459	4.55	2.0	
24	10,380	75.00	10.9	Upper Marker
25	12,519	0.00	0.0	
26	12,980	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: 11/25/2014 3:13:43 PM

Electropherogram Summary Continued ...

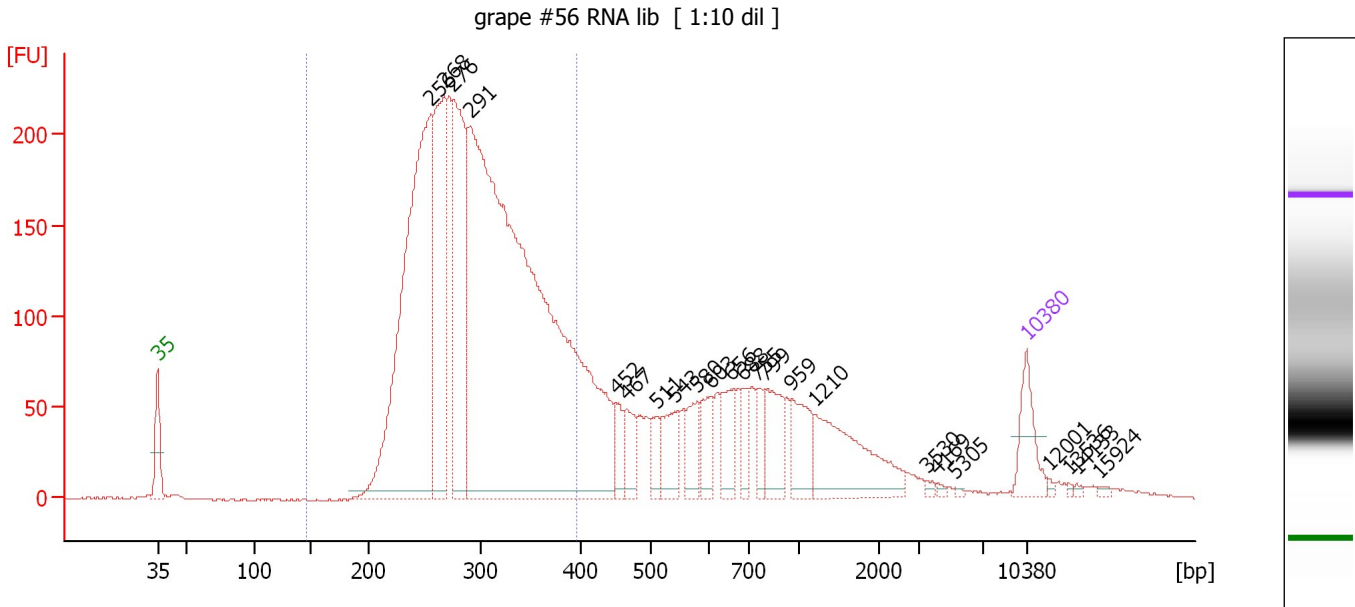
... Region table for sample 3 : grape #60 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
144	297	412	2,852.9	74	16.5	4,498.40	23,727.7	

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: 3,587.2
 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	256	1,233.78	7,289.2	
3	268	493.85	2,792.2	
4	276	512.80	2,815.1	
5	291	2,805.49	14,605.7	
6	452	50.70	170.1	
7	467	68.25	221.6	
8	511	50.58	150.0	
9	543	88.83	248.0	
10	580	72.77	190.1	
11	603	72.88	183.0	
12	656	84.98	196.2	
13	688	53.62	118.1	
14	755	41.96	84.2	
15	799	112.08	212.6	
16	959	97.08	153.3	
17	1,210	216.70	271.4	
18	3,530	5.58	2.4	
19	4,169	4.84	1.8	
20	5,305	3.64	1.0	
21	10,380	75.00	10.9	Upper Marker
22	12,001	0.00	0.0	
23	13,536	0.00	0.0	
24	14,133	0.00	0.0	
25	15,924	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: 11/25/2014 3:13:43 PM

Electropherogram Summary Continued ...

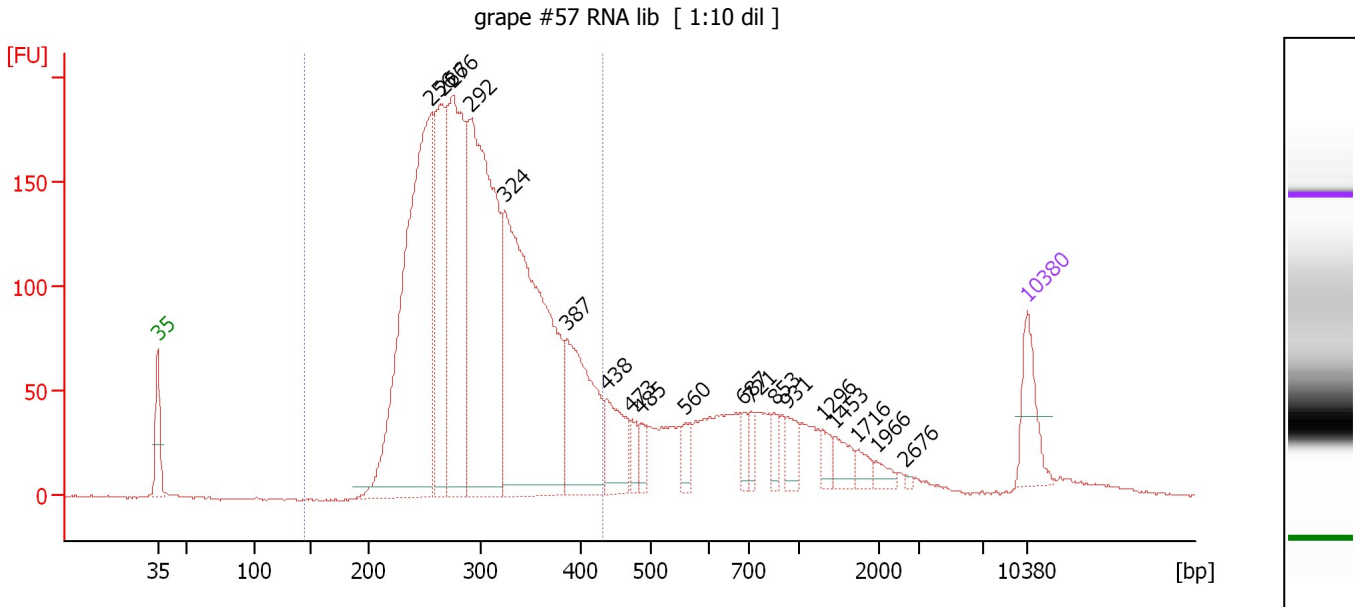
... Region table for sample 4 : grape #56 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
146	296	396	3,587.2	69	15.5	4,642.21	24,469.2	

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 5 : grape #57 RNA lib

Number of peaks found: 19 Corr. Area 1: 3,210.0
 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	256	1,019.99	6,034.5	
3	266	363.75	2,073.9	
4	276	590.17	3,241.0	
5	292	867.04	4,496.7	
6	324	916.29	4,279.7	
7	387	291.67	1,142.2	
8	438	118.77	410.6	
9	473	32.63	104.5	
10	485	31.26	97.6	
11	560	31.71	85.8	
12	687	28.63	63.1	
13	721	26.39	55.5	
14	853	25.24	44.8	
15	931	40.28	65.6	
16	1,296	23.24	27.2	
17	1,453	35.10	36.6	
18	1,716	20.88	18.4	
19	1,966	16.47	12.7	
20	2,676	2.78	1.6	
21	10,380	75.00	10.9	Upper Marker

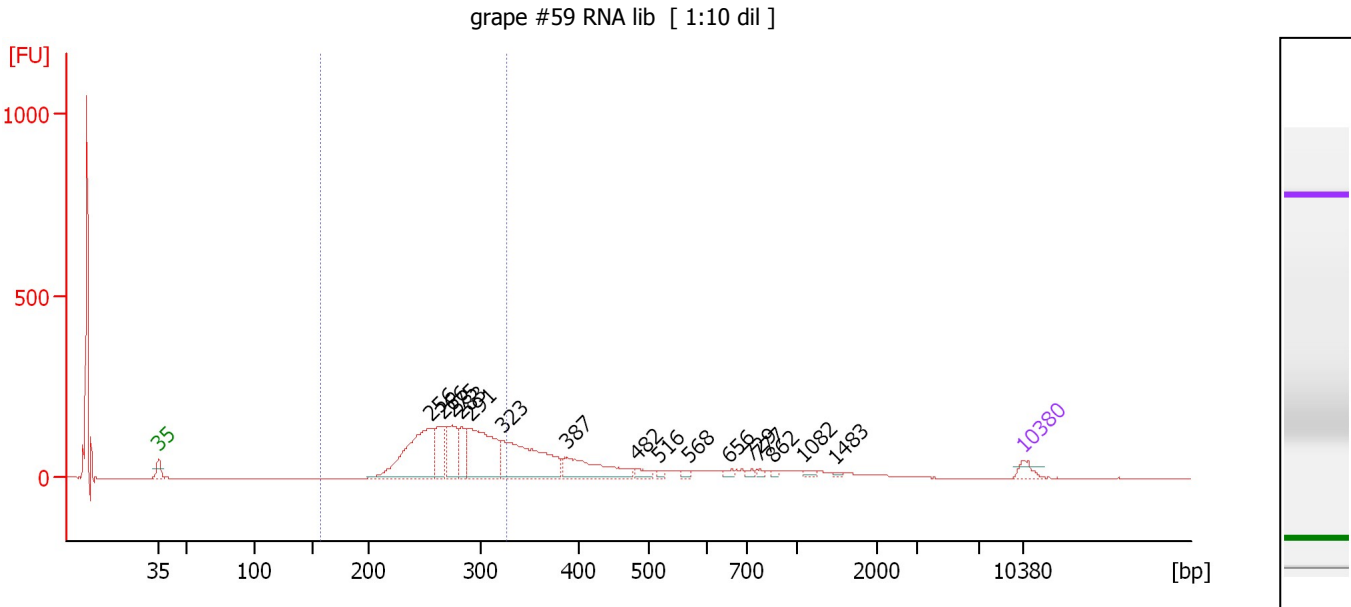
Region table for sample 5 : grape #57 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
144	302	431	3,210.0	77	17.1	4,002.14	20,795.7	Blue

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 6 : grape #59 RNA lib

Number of peaks found: 16 Corr. Area 1: 1,711.8
 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	256	1,304.35	7,708.9	
3	266	432.64	2,463.8	
4	275	492.66	2,711.9	
5	283	276.92	1,480.4	
6	291	1,090.97	5,679.0	
7	323	1,171.23	5,497.9	
8	387	567.90	2,224.7	
9	482	77.43	243.3	
10	516	31.72	93.2	
11	568	34.16	91.2	
12	656	42.15	97.4	
13	729	32.29	67.1	
14	777	27.49	53.6	
15	862	23.38	41.1	
16	1,082	36.28	50.8	
17	1,483	17.42	17.8	
18	10,380	75.00	10.9	Upper Marker

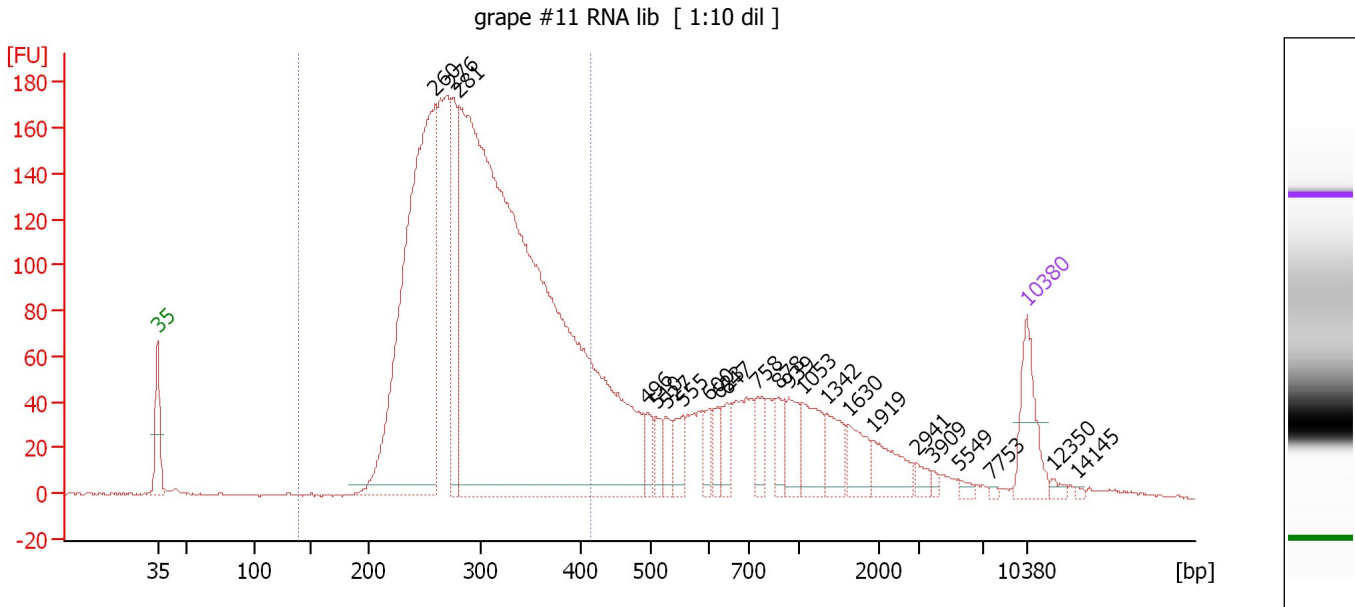
Region table for sample 6 : grape #59 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
158	274	327	1,711.8	46	10.3	3,816.52	21,267.4	Blue

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 7 : grape #11 RNA lib

Number of peaks found: 23 Corr. Area 1: 2,992.6
 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	260	1,042.44	6,078.3	
3	276	200.76	1,102.9	
4	281	2,635.39	14,186.9	
5	496	33.30	101.7	
6	510	31.30	93.0	
7	527	34.25	98.5	
8	555	41.12	112.2	
9	600	28.26	71.4	
10	623	27.12	65.9	
11	647	32.50	76.1	
12	758	40.59	81.2	
13	878	37.45	64.6	
14	939	51.11	82.4	
15	1,053	69.92	100.6	
16	1,342	53.91	60.9	
17	1,630	46.95	43.6	
18	1,919	54.66	43.2	
19	2,941	13.25	6.8	
20	3,909	5.29	2.0	
21	5,549	6.85	1.9	
22	7,753	2.65	0.5	
23	10,380	75.00	10.9	Upper Marker
24	12,350	0.00	0.0	
25	14,145	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: 11/25/2014 3:13:43 PM

Electropherogram Summary Continued ...

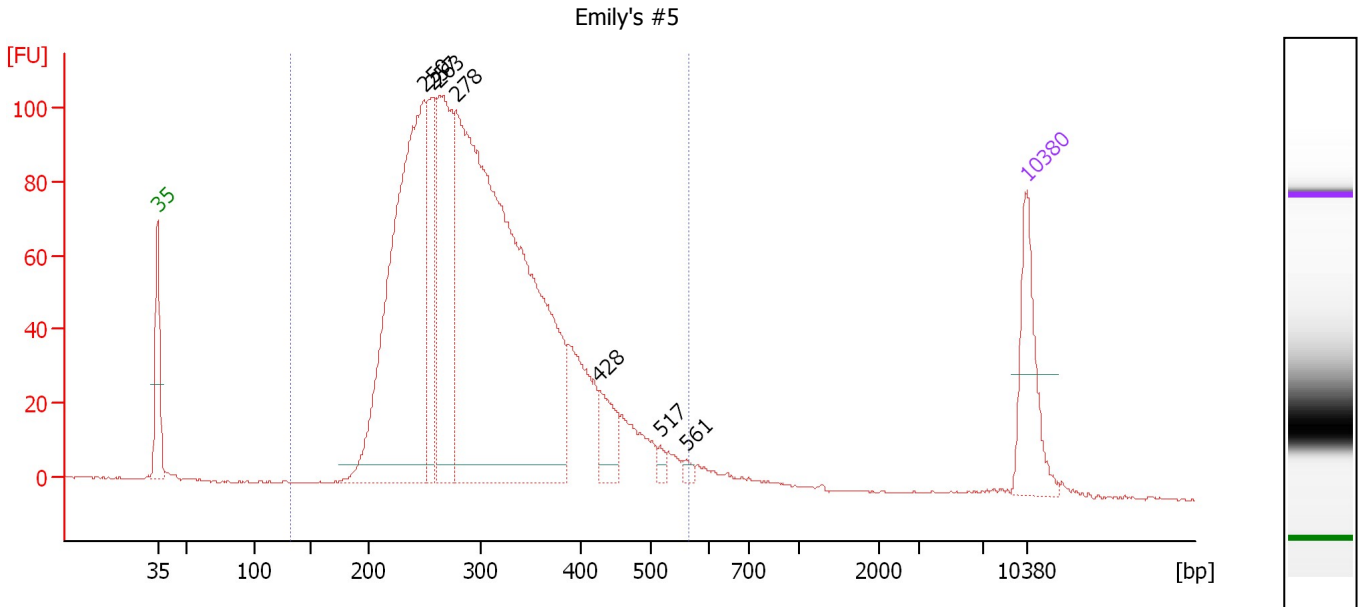
... Region table for sample 7 : grape #11 RNA lib

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
139	301	415	2,992.6	71	16.6	3,667.34	19,121.5	

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 8 : Emily's #5

Number of peaks found: 7 Corr. Area 1: 2,067.8
 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	250	621.45	3,768.2	
3	257	136.96	807.2	
4	263	275.88	1,587.7	
5	278	1,113.93	6,066.5	
6	428	48.33	171.2	
7	517	7.96	23.3	
8	561	6.04	16.3	
9	10,380	75.00	10.9	Upper Marker

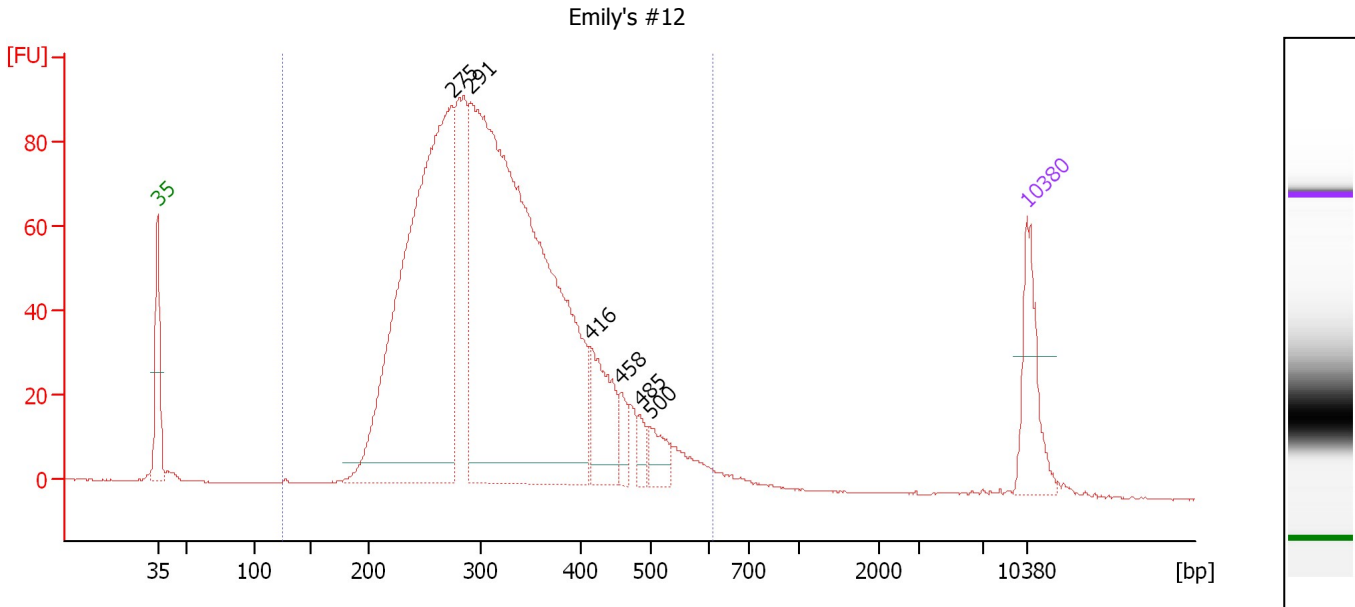
Region table for sample 8 : Emily's #5

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
132	308	564	2,067.8	97	23.6	2,373.99	12,465.6	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
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Electropherogram Summary Continued ...



Overall Results for sample 9 : Emily's #12

Number of peaks found: 6 Corr. Area 1: 1,883.0
 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	275	949.20	5,227.5	
3	291	1,375.32	7,158.8	
4	416	105.02	382.2	
5	458	29.04	96.0	
6	485	20.20	63.1	
7	500	36.01	109.1	
8	10,380	75.00	10.9	Upper Marker

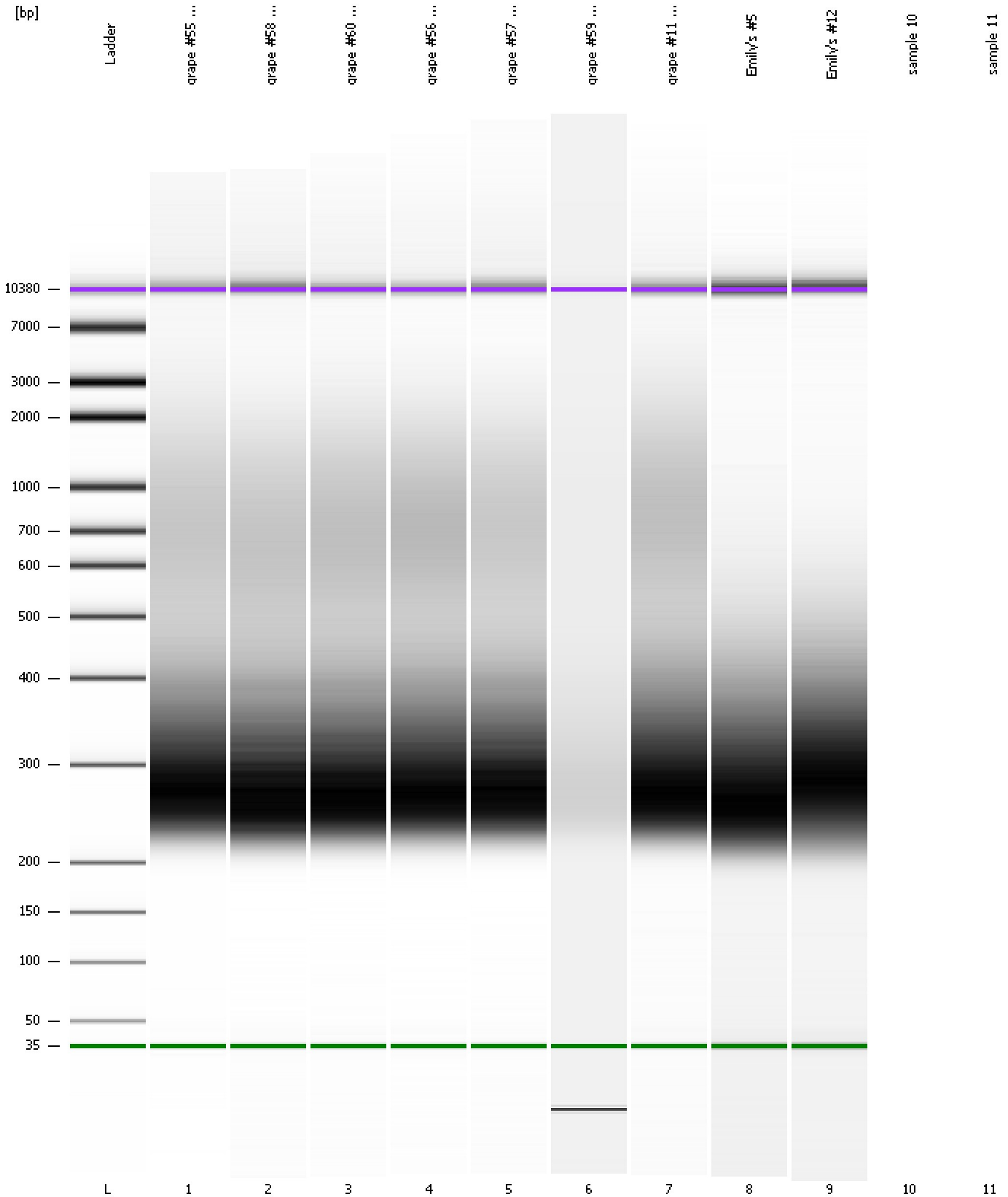
Region table for sample 9 : Emily's #12

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
125	322	608	1,883.0	98	24.2	2,785.74	14,062.2	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: 11/25/2014 3:13:43 PM

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: 11/25/2014 3:13:43 PM

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: 11/25/2014 3:13:43 PM

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