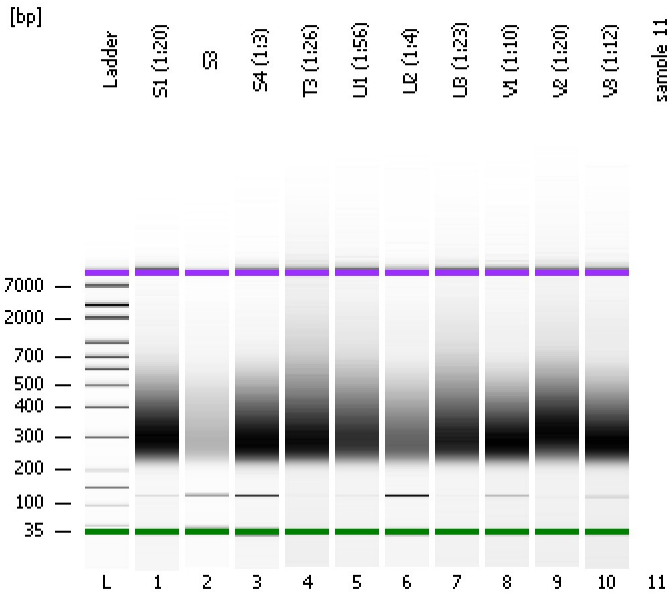


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
Modified: 1/12/2015 1:32:00 PM

Electrophoresis File Run Summary



Instrument Information:

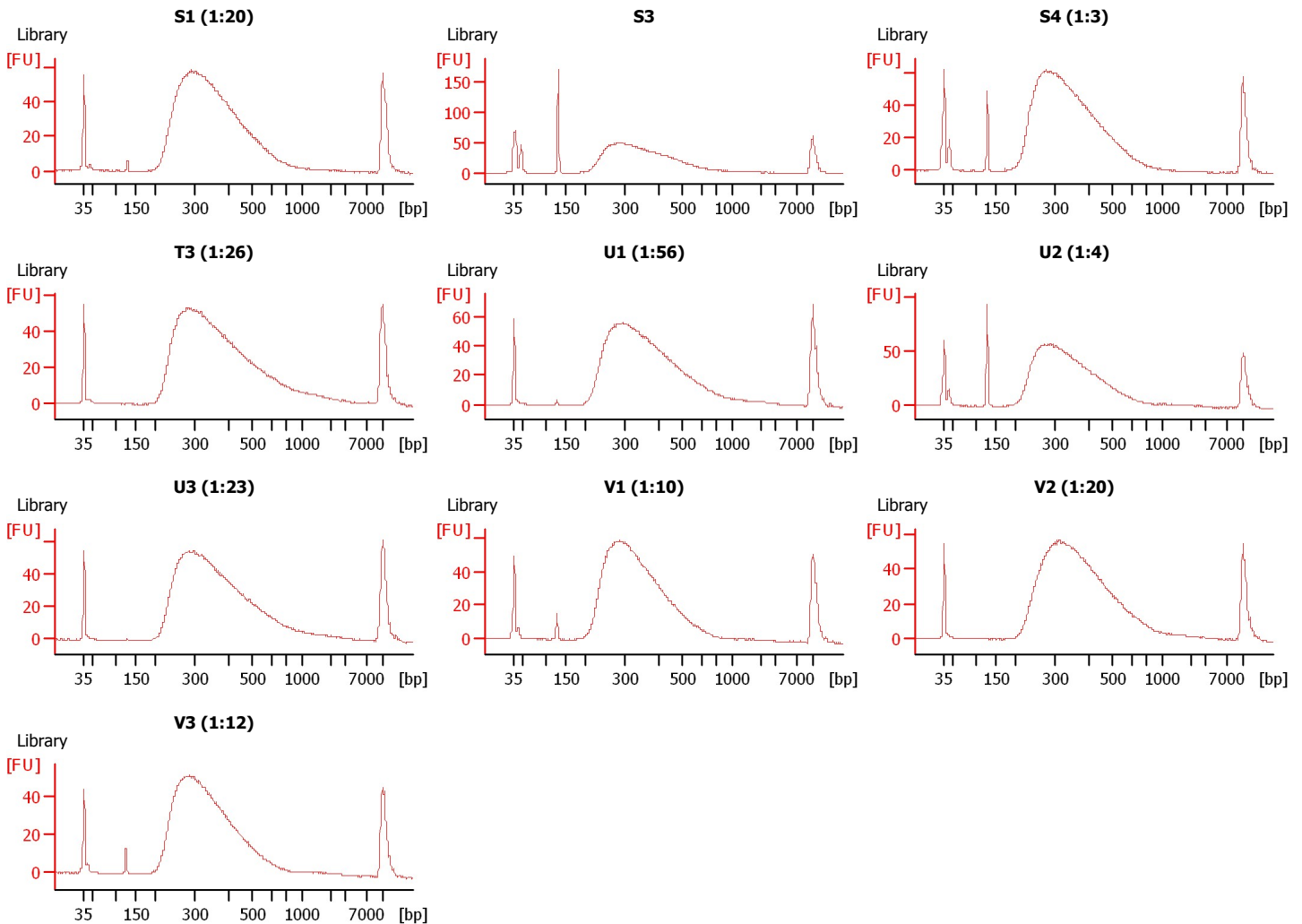
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
S1 (1:20)	Library	<input type="checkbox"/>	✓			
S3	Library	<input type="checkbox"/>	✓			
S4 (1:3)	Library	<input type="checkbox"/>	✓			
T3 (1:26)	Library	<input type="checkbox"/>	✓			
U1 (1:56)	Library	<input type="checkbox"/>	✓			
U2 (1:4)	Library	<input type="checkbox"/>	✓			
U3 (1:23)	Library	<input type="checkbox"/>	✓			
V1 (1:10)	Library	<input type="checkbox"/>	✓			
V2 (1:20)	Library	<input type="checkbox"/>	✓			
V3 (1:12)	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:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
Modified: 1/12/2015 1:32:00 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

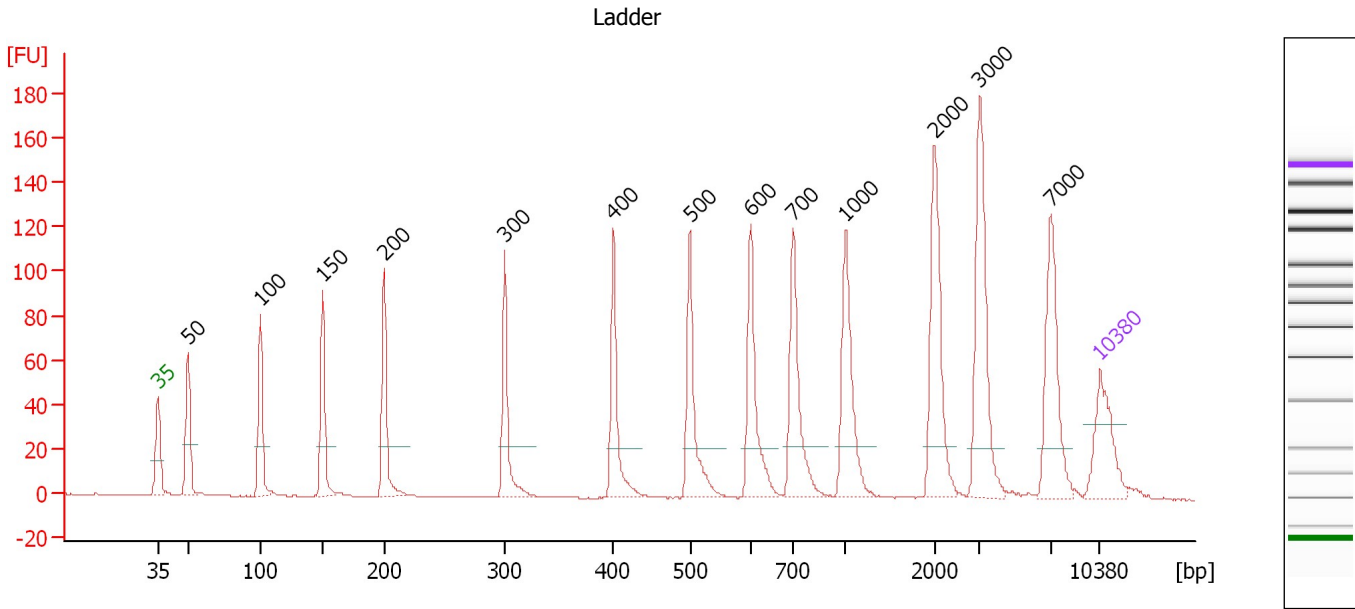
Ladder

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\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

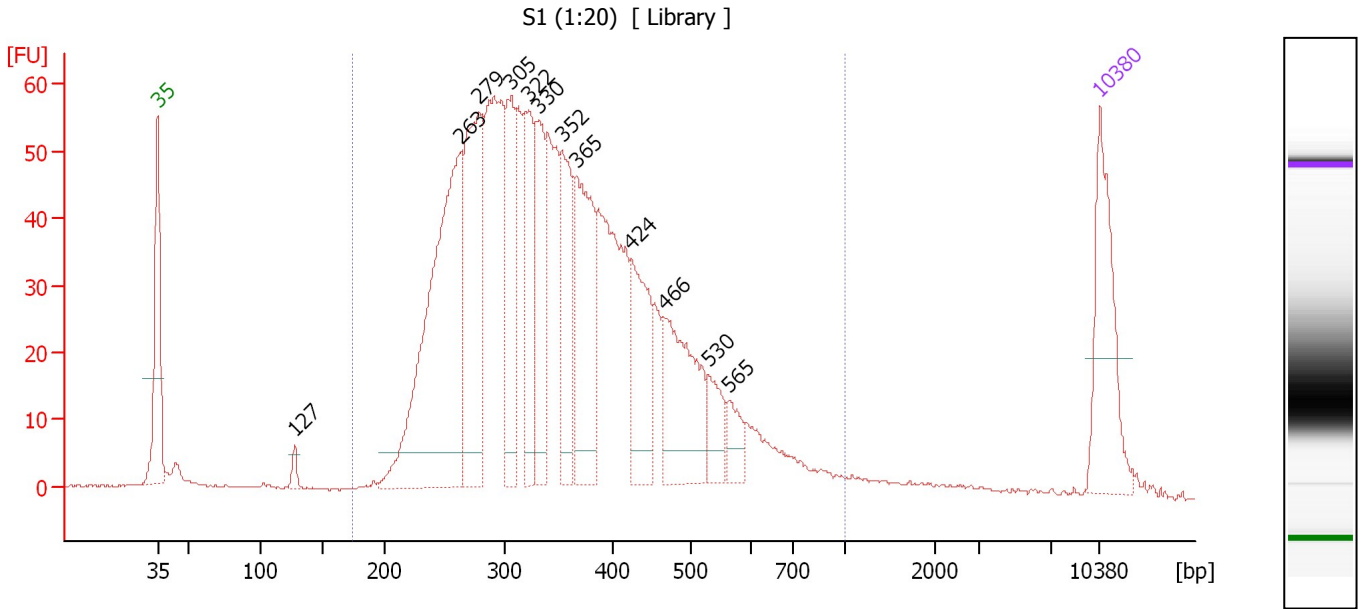
Peak table for Ladder

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	45.23
3	100	150.00	2,272.7	Ladder Peak	50.65
4	150	150.00	1,515.2	Ladder Peak	55.26
5	200	150.00	1,136.4	Ladder Peak	59.82
6	300	150.00	757.6	Ladder Peak	68.80
7	400	150.00	568.2	Ladder Peak	76.88
8	500	150.00	454.5	Ladder Peak	82.54
9	600	150.00	378.8	Ladder Peak	87.05
10	700	150.00	324.7	Ladder Peak	90.19
11	1,000	150.00	227.3	Ladder Peak	94.09
12	2,000	150.00	113.6	Ladder Peak	100.69
13	3,000	150.00	75.8	Ladder Peak	104.07
14	7,000	150.00	32.5	Ladder Peak	109.39
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : S1 (1:20)

Number of peaks found: 12 Corr. Area 1: 1,423.2
 Noise: 0.2

Peak table for sample 1 : S1 (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	127	9.65	115.0		53.15
3	263	353.55	2,038.0		65.47
4	279	197.79	1,074.5		66.91
5	305	104.71	519.9		69.22
6	322	91.63	431.4		70.57
7	330	92.62	425.1		71.24
8	352	97.63	420.0		73.02
9	365	138.70	575.3		74.08
10	424	89.95	321.8		78.22
11	466	110.90	360.5		80.62
12	530	31.93	91.3		83.89
13	565	22.07	59.2		85.48
14	10,380	75.00	10.9	Upper Marker	113.00

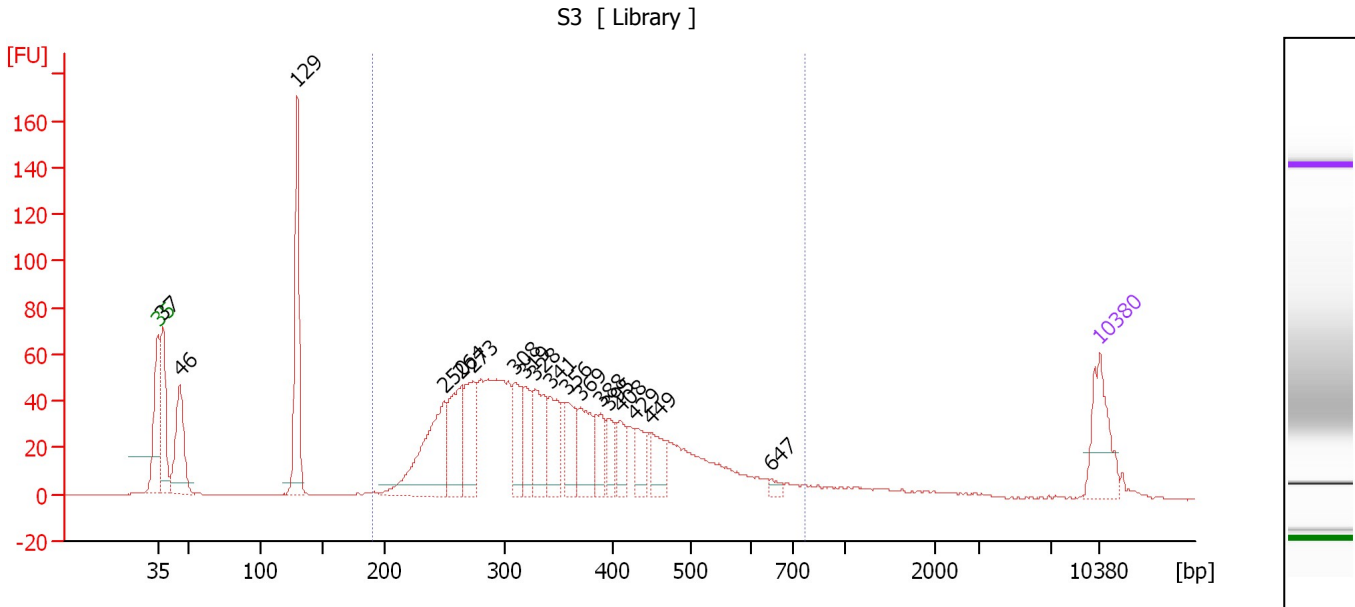
Region table for sample 1 : S1 (1:20)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
174	364	1,000	1,423.2	97	30.4	2,056.06	9,498.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : S3

Number of peaks found: 18 Corr. Area 1: 1,243.6
 Noise: 0.2

Peak table for sample 2 : S3

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	37	179.74	7,304.2		43.34
3	46	157.40	5,174.0		44.65
4	129	264.31	3,098.6		53.35
5	250	210.74	1,276.5		64.33
6	264	127.39	732.1		65.54
7	273	125.26	694.2		66.41
8	308	72.55	356.5		69.47
9	319	73.37	349.0		70.30
10	328	95.67	441.7		71.08
11	341	87.32	387.6		72.15
12	356	64.33	273.5		73.36
13	369	85.48	351.0		74.38
14	388	55.99	218.8		75.89
15	395	40.42	154.9		76.52
16	408	38.19	141.8		77.34
17	429	41.53	146.8		78.51
18	449	53.76	181.6		79.63
19	647	10.27	24.1		88.52
20	10,380	75.00	10.9	Upper Marker	113.00

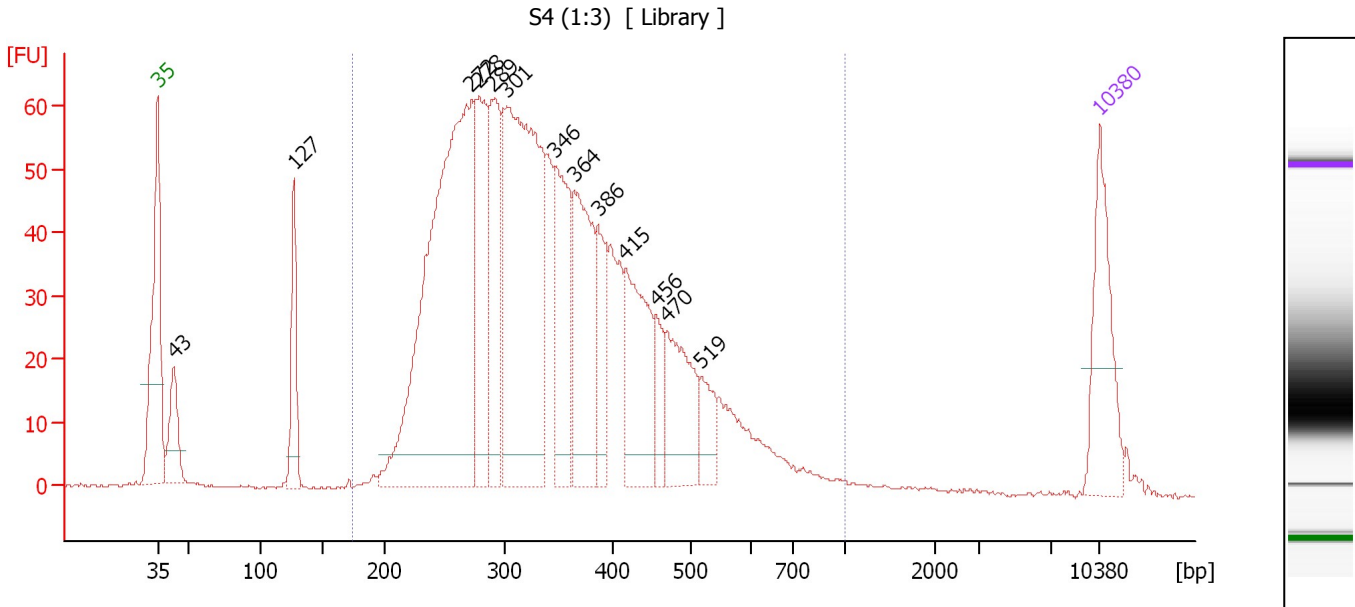
Region table for sample 2 : S3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
190	360	767	1,243.6	76	28.4	1,800.82	8,374.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : S4 (1:3)

Number of peaks found: 13 Corr. Area 1: 1,489.4
 Noise: 0.2

Peak table for sample 3 : S4 (1:3)

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	43	66.40	2,337.9		44.20
3	127	79.52	950.9		53.11
4	272	593.47	3,302.2		66.32
5	278	142.23	774.0		66.86
6	289	137.45	719.4		67.86
7	301	422.90	2,126.8		68.91
8	346	131.53	575.5		72.54
9	364	148.48	618.8		73.94
10	386	63.93	251.1		75.73
11	415	122.02	445.6		77.73
12	456	34.19	113.5		80.07
13	470	91.58	295.5		80.81
14	519	33.82	98.7		83.41
15	10,380	75.00	10.9	Upper Marker	113.00

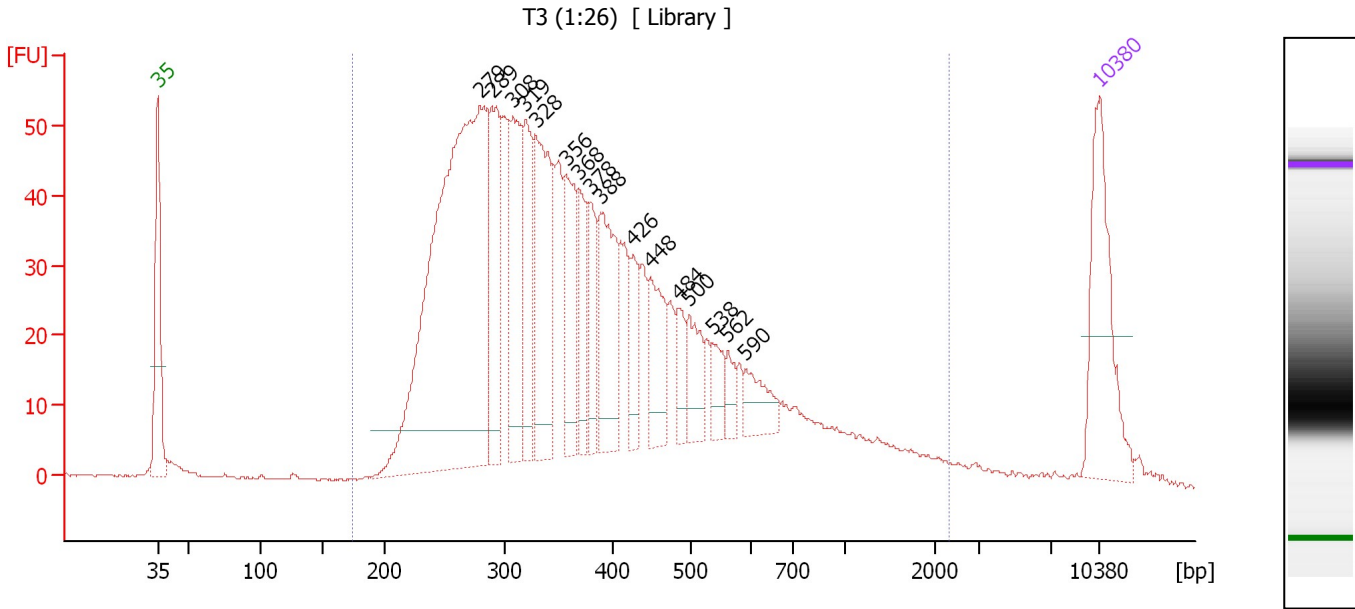
Region table for sample 3 : S4 (1:3)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
174	355	1,000	1,489.4	94	30.2	2,257.10	10,679.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : T3 (1:26)

Number of peaks found: 16 Corr. Area 1: 1,460.6
 Noise: 0.2

Peak table for sample 4 : T3 (1:26)

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	279	536.52	2,910.9		66.94
3	289	101.91	533.5		67.86
4	308	99.13	488.1		69.43
5	319	69.55	330.3		70.34
6	328	126.06	581.6		71.10
7	356	74.71	317.9		73.33
8	368	44.79	184.4		74.30
9	378	41.44	166.1		75.11
10	388	88.30	344.8		75.92
11	426	32.11	114.2		78.36
12	448	52.26	176.9		79.57
13	484	22.83	71.4		81.65
14	500	34.24	103.9		82.51
15	538	19.88	56.0		84.24
16	562	12.38	33.3		85.36
17	590	26.50	68.0		86.62
18	10,380	75.00	10.9	Upper Marker	113.00

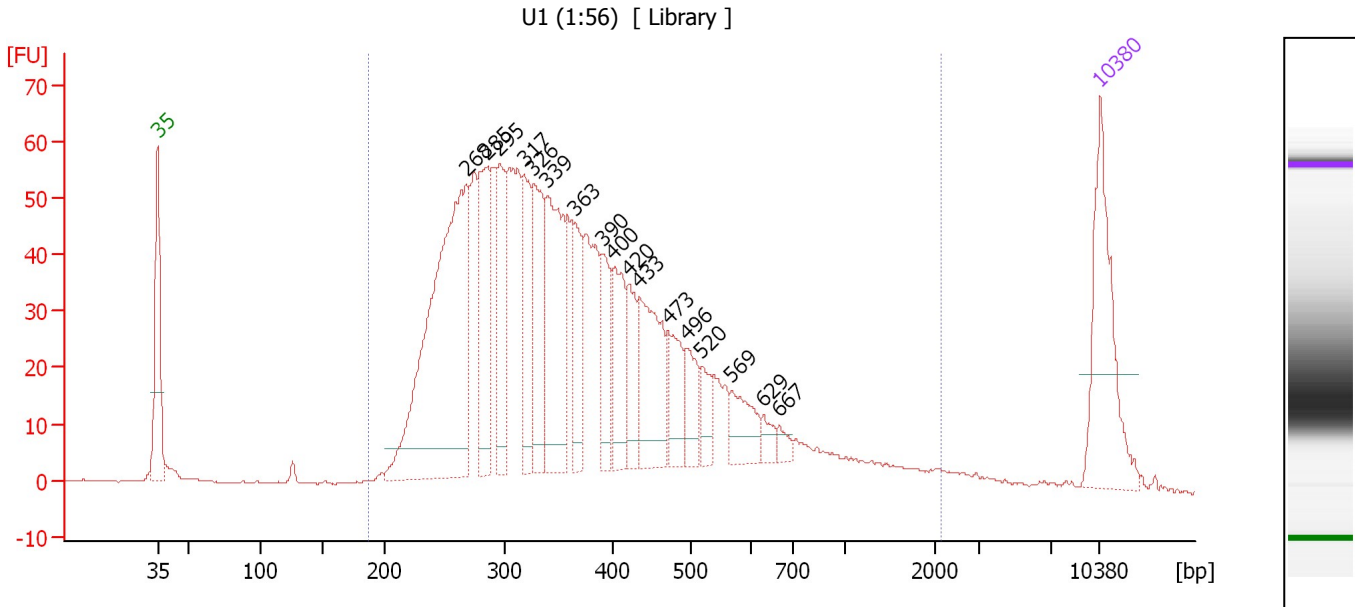
Region table for sample 4 : T3 (1:26)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
175	435	2,338	1,460.6	96	64.5	2,001.61	8,894.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : U1 (1:56)

Number of peaks found: 17 Corr. Area 1: 1,492.1
 Noise: 0.2

Peak table for sample 5 : U1 (1:56)

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	268	337.27	1,907.5		65.92
3	285	94.84	504.0		67.47
4	295	67.24	344.8		68.40
5	317	65.56	313.0		70.21
6	326	74.99	348.2		70.93
7	339	123.75	553.0		71.96
8	363	48.56	202.5		73.92
9	390	42.41	165.0		76.04
10	400	51.48	195.1		76.86
11	420	36.79	132.8		78.00
12	433	79.32	277.3		78.77
13	473	36.34	116.5		80.99
14	496	29.65	90.5		82.34
15	520	19.93	58.1		83.42
16	569	29.58	78.8		85.64
17	629	9.34	22.5		87.96
18	667	6.69	15.2		89.15
19	10,380	75.00	10.9	Upper Marker	113.00

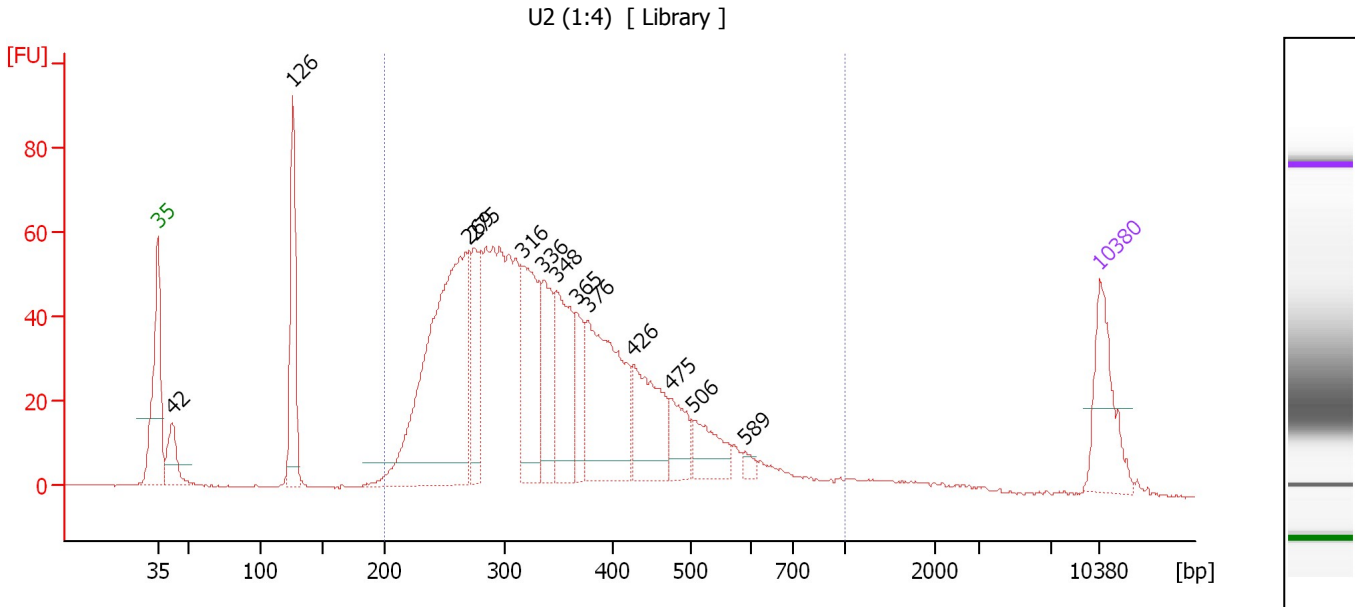
Region table for sample 5 : U1 (1:56)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
188	412	2,151	1,492.0	97	57.5	1,743.41	7,830.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : U2 (1:4)

Number of peaks found: 13 Corr. Area 1: 1,339.2
 Noise: 0.2

Peak table for sample 6 : U2 (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	42	60.80	2,175.6		44.09
3	126	164.21	1,975.2		53.04
4	269	510.14	2,869.2		66.06
5	275	96.77	533.9		66.52
6	316	170.33	817.8		70.06
7	336	102.56	463.1		71.68
8	348	135.21	589.0		72.67
9	365	59.36	246.3		74.07
10	376	224.22	903.2		74.96
11	426	120.87	430.2		78.34
12	475	51.47	164.0		81.15
13	506	55.65	166.6		82.81
14	589	9.14	23.5		86.56
15	10,380	75.00	10.9	Upper Marker	113.00

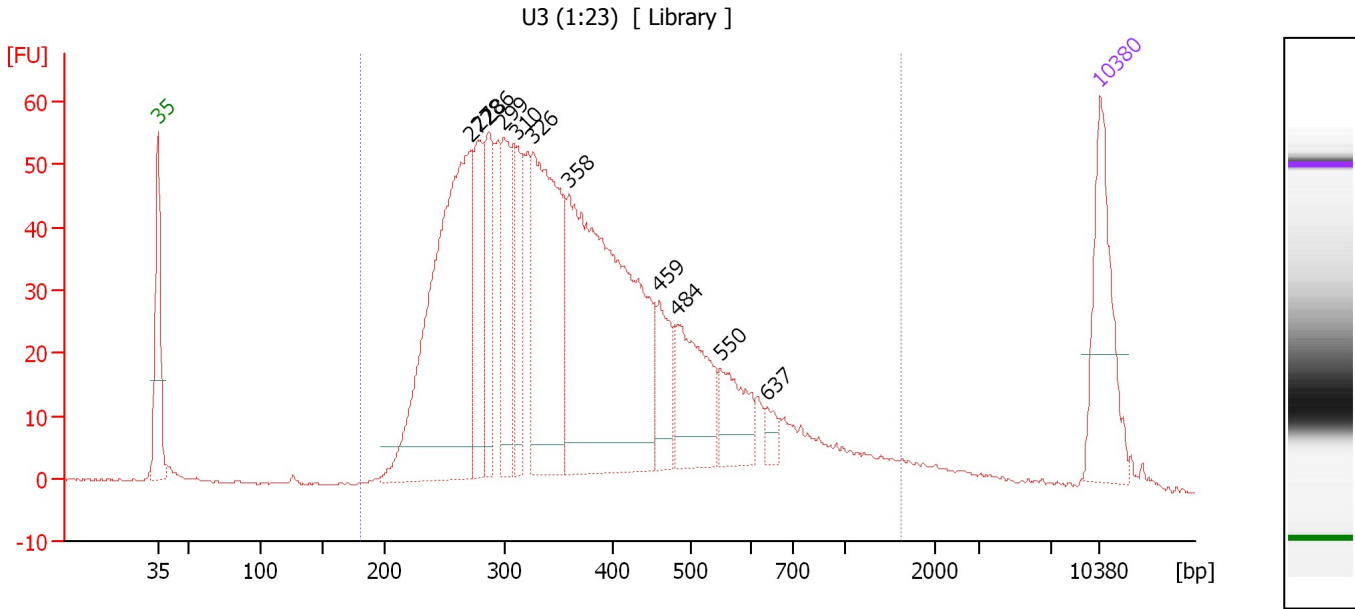
Region table for sample 6 : U2 (1:4)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	355	1,000	1,339.2	90	31.0	2,139.59	10,121.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : U3 (1:23)

Number of peaks found: 11 Corr. Area 1: 1,426.6
 Noise: 0.2

Peak table for sample 7 : U3 (1:23)

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	272	394.08	2,194.4		66.30
3	278	91.38	498.1		66.83
4	286	78.68	416.6		67.56
5	299	92.98	472.0		68.67
6	310	71.61	349.9		69.62
7	326	228.26	1,059.6		70.94
8	358	418.57	1,772.9		73.47
9	459	52.77	174.2		80.21
10	484	95.85	300.0		81.64
11	550	49.67	136.8		84.80
12	637	11.56	27.5		88.23
13	10,380	75.00	10.9	Upper Marker	113.00

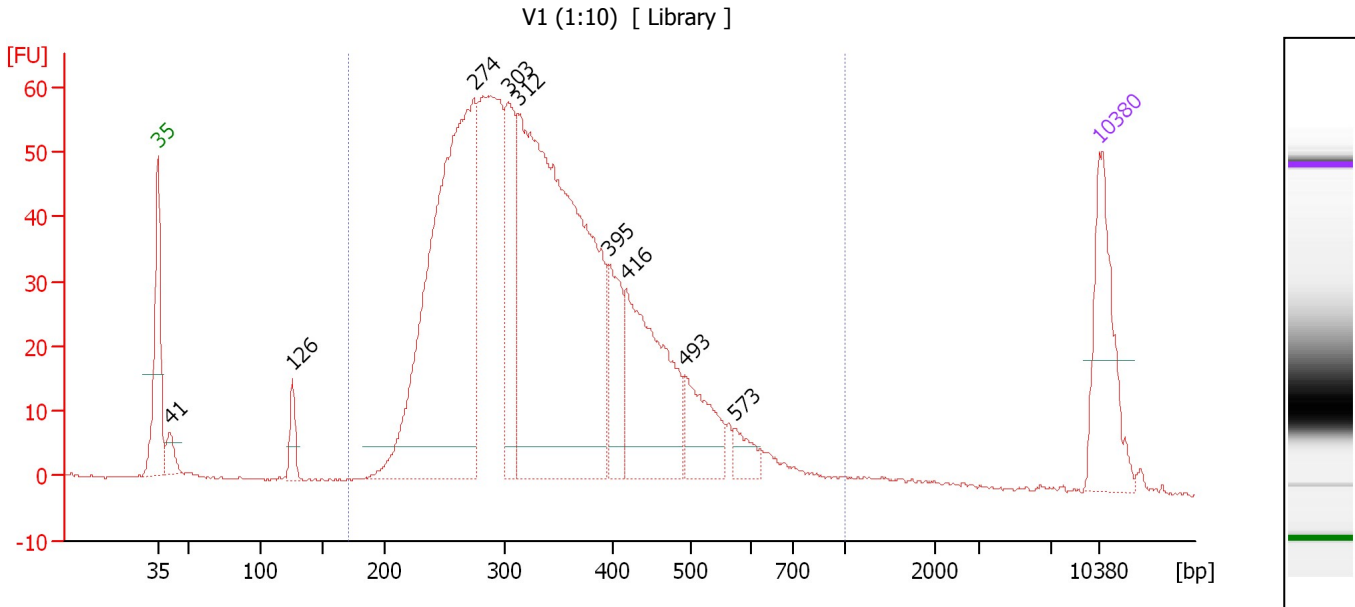
Region table for sample 7 : U3 (1:23)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
181	401	1,635	1,426.6	96	47.4	1,914.34	8,599.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : V1 (1:10)

Number of peaks found: 9 Corr. Area 1: 1,316.6
 Noise: 0.2

Peak table for sample 8 : V1 (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	41	21.44	791.9		43.90
3	126	25.33	304.8		53.04
4	274	554.16	3,059.4		66.51
5	303	115.68	578.5		69.05
6	312	654.26	3,175.9		69.78
7	395	68.46	262.5		76.49
8	416	172.41	627.2		77.82
9	493	61.30	188.4		82.15
10	573	17.88	47.3		85.85
11	10,380	75.00	10.9	Upper Marker	113.00

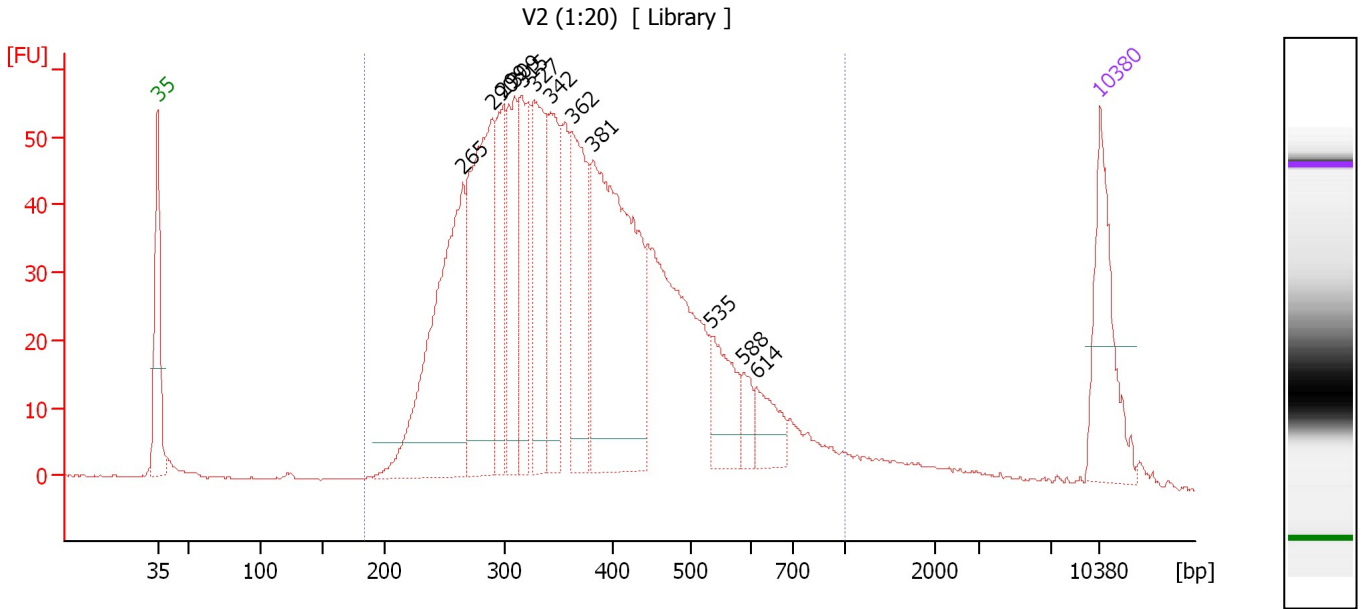
Region table for sample 8 : V1 (1:10)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
172	348	1,000	1,316.6	96	29.1	1,983.62	9,468.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : V2 (1:20)

Number of peaks found: 12 Corr. Area 1: 1,417.2
 Noise: 0.1

Peak table for sample 9 : V2 (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	265	298.69	1,709.1		65.64
3	290	249.55	1,305.4		67.87
4	299	85.65	434.7		68.67
5	309	98.84	484.8		69.52
6	315	97.79	469.7		70.05
7	327	118.47	549.5		70.96
8	342	105.05	465.7		72.18
9	362	127.41	534.0		73.77
10	381	315.38	1,253.4		75.37
11	535	58.52	165.6		84.14
12	588	18.76	48.3		86.53
13	614	33.44	82.5		87.49
14	10,380	75.00	10.9	Upper Marker	113.00

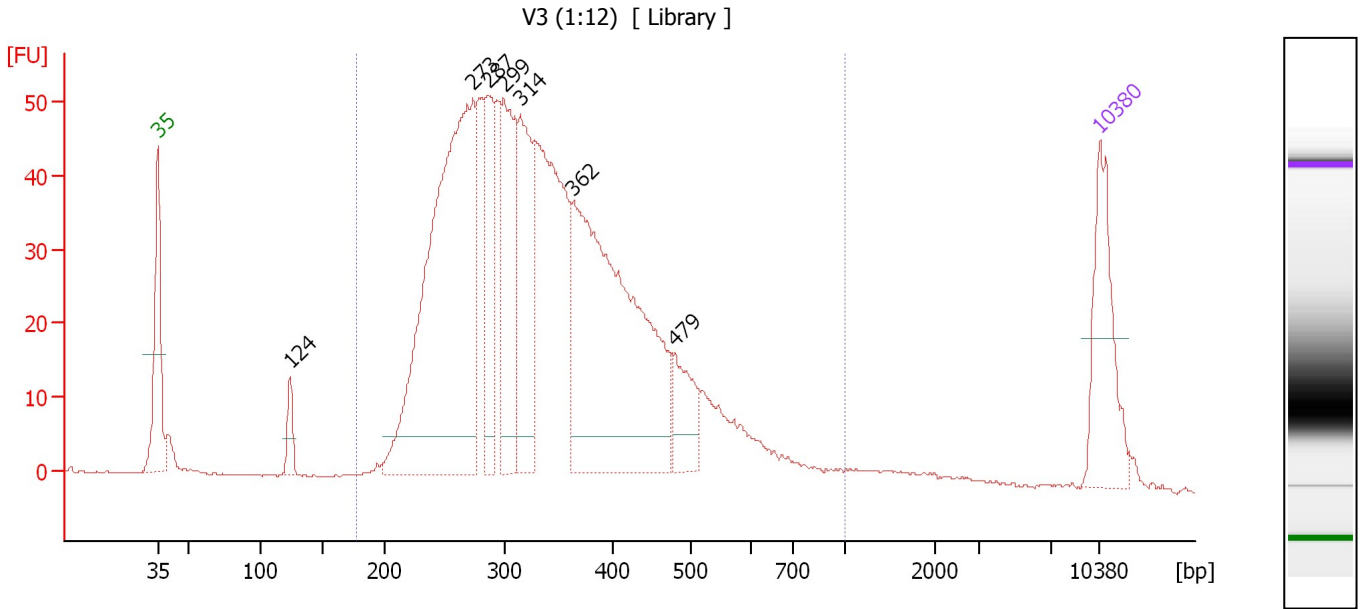
Region table for sample 9 : V2 (1:20)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
185	386	1,000	1,417.2	95	32.4	2,130.34	9,405.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : V3 (1:12)

Number of peaks found: 7 Corr. Area 1: 1,149.3
 Noise: 0.1

Peak table for sample 10 : V3 (1:12)

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	24.48	299.5		52.85
3	273	534.28	2,964.4		66.39
4	287	93.04	491.6		67.62
5	299	140.98	713.7		68.74
6	314	147.04	708.5		69.97
7	362	427.25	1,787.5		73.83
8	479	50.60	159.9		81.37
9	10,380	75.00	10.9	Upper Marker	113.00

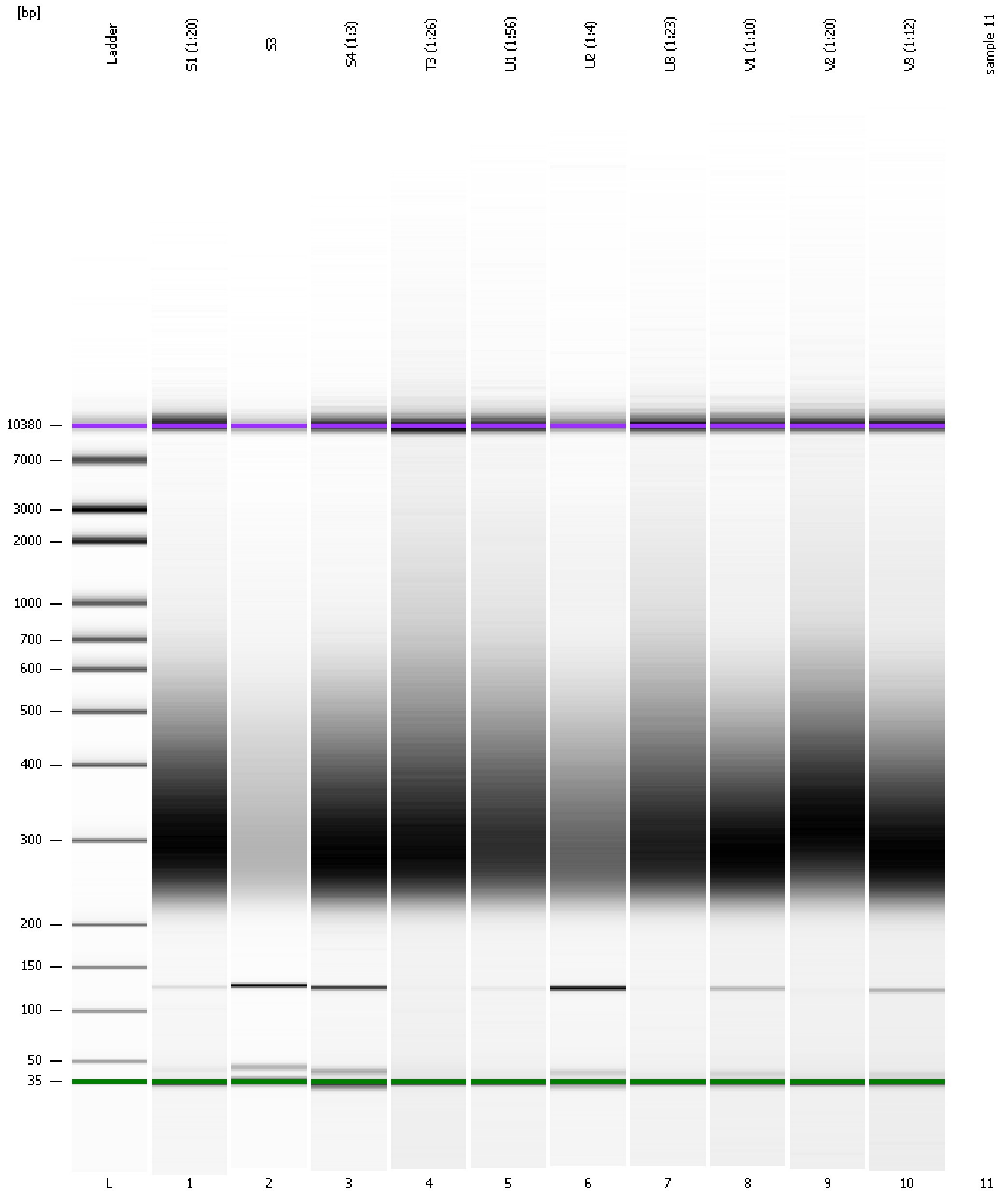
Region table for sample 10 : V3 (1:12)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
178	351	1,000	1,149.3	96	30.2	1,968.72	9,381.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
Modified: 1/12/2015 1:32:00 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
Modified: 1/12/2015 1:32:00 PM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad

Created: 1/12/2015 12:49:48 PM
 Modified: 1/12/2015 1:32:00 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		1/12/2015 1:28:14 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-01-12\2015-01-12_003.xad)		Instrument	Run		1/12/2015 12:49:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/12/2015 12:49:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/12/2015 12:49:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/12/2015 12:49:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/12/2015 12:49:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/12/2015 12:49:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/12/2015 12:49:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1