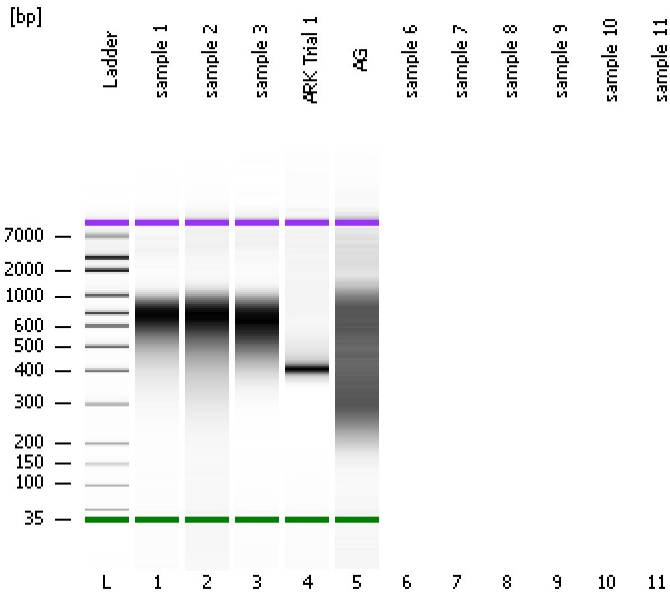


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
Modified: 11/11/2015 9:34:14 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

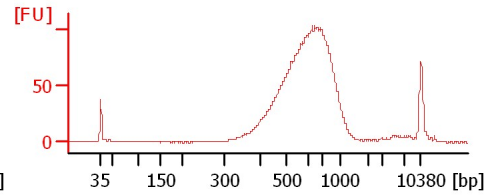
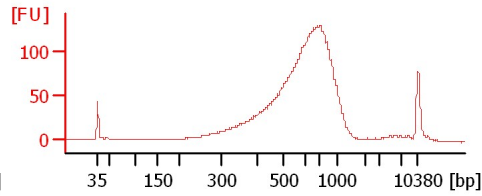
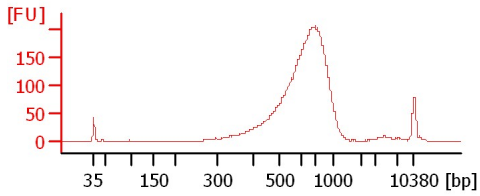
Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:

sample 1

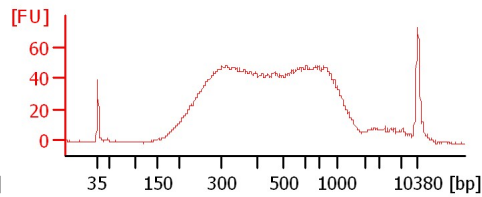
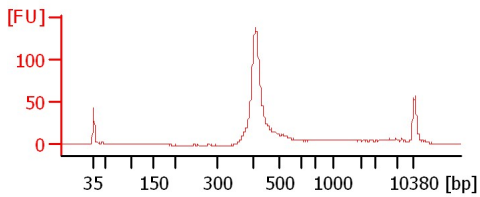
sample 2

sample 3



ARK Trial 1

AG



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
 Modified: 11/11/2015 9:34:14 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
ARK Trial 1		<input type="checkbox"/>	✓			
AG		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>				
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<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\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
Modified: 11/11/2015 9:34:14 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

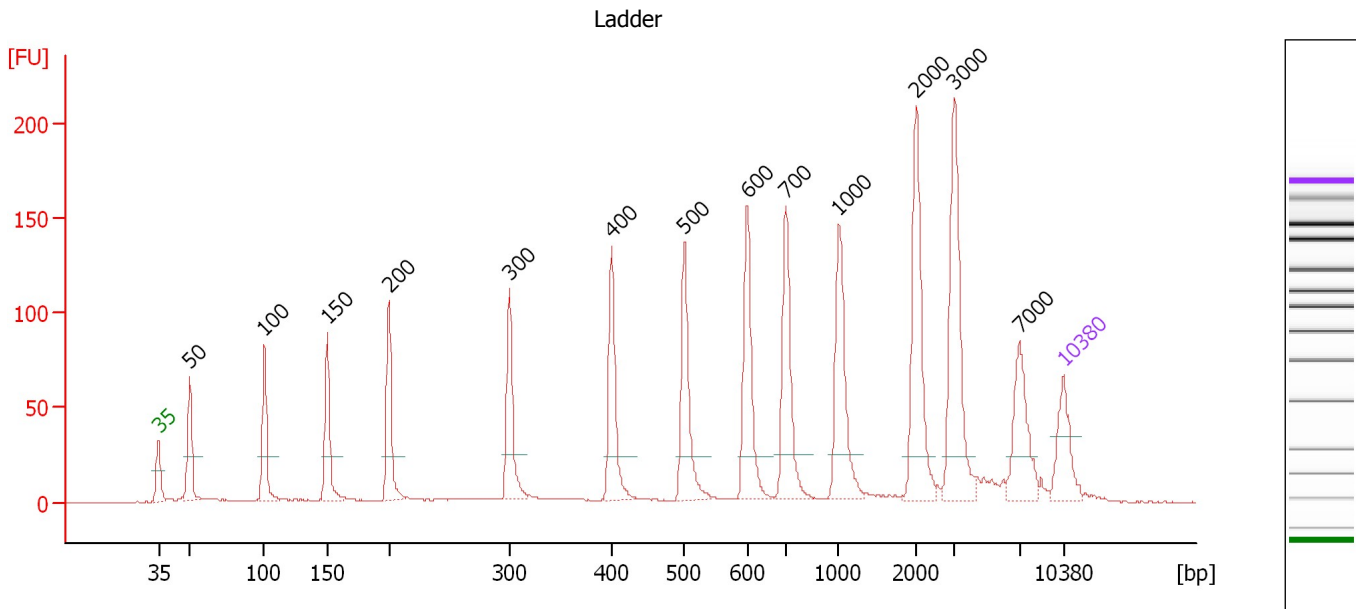
Ladder

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\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
 Modified: 11/11/2015 9:34:14 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

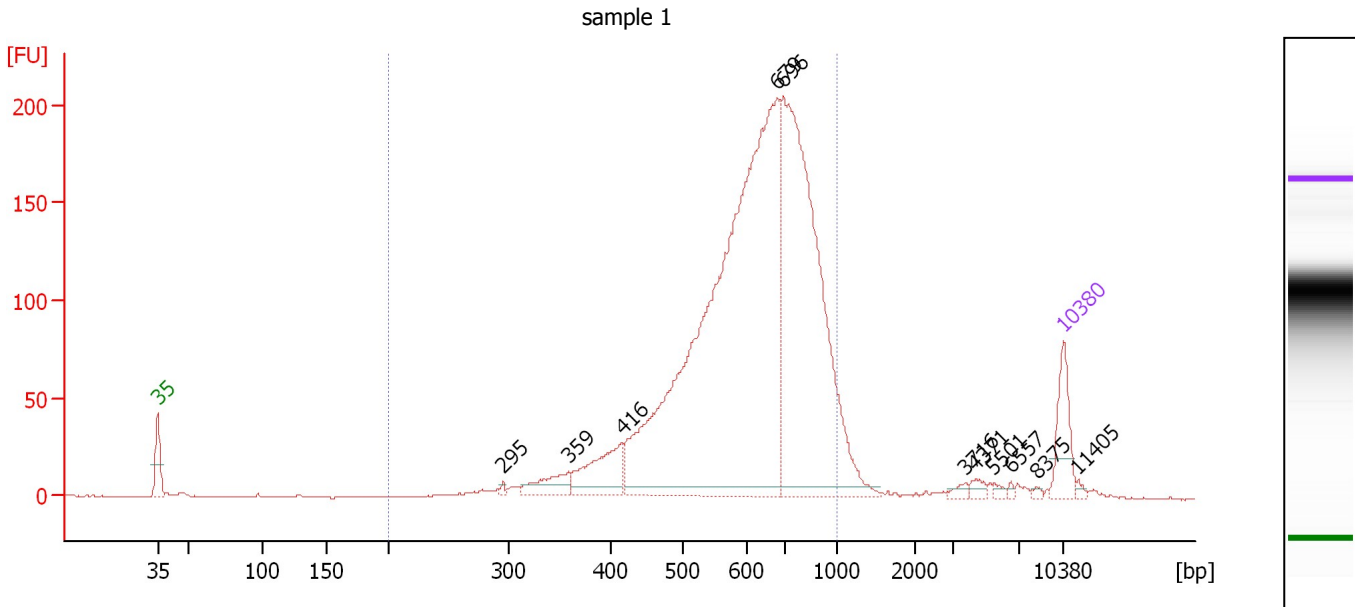
Peak table for Ladder

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	45.41
3	100	150.00	2,272.7	Ladder Peak	51.18
4	150	150.00	1,515.2	Ladder Peak	56.04
5	200	150.00	1,136.4	Ladder Peak	60.81
6	300	150.00	757.6	Ladder Peak	70.12
7	400	150.00	568.2	Ladder Peak	78.02
8	500	150.00	454.5	Ladder Peak	83.66
9	600	150.00	378.8	Ladder Peak	88.52
10	700	150.00	324.7	Ladder Peak	91.51
11	1,000	150.00	227.3	Ladder Peak	95.60
12	2,000	150.00	113.6	Ladder Peak	101.60
13	3,000	150.00	75.8	Ladder Peak	104.55
14	7,000	150.00	32.5	Ladder Peak	109.55
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
 Modified: 11/11/2015 9:34:14 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 11 Corr. Area 1: 2,380.5
 Noise: 0.2

Peak table for sample 1 : sample 1

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	295	6.33	32.5		69.67
3	359	63.84	269.1		74.81
4	416	139.41	508.1		78.91
5	679	1,848.88	4,126.5		90.88
6	696	1,069.69	2,330.1		91.38
7	3,716	9.39	3.8		105.44
8	4,371	12.77	4.4		106.26
9	5,501	7.02	1.9		107.67
10	6,557	3.97	0.9		108.99
11	8,375	4.55	0.8		110.95
12	10,380	75.00	10.9	Upper Marker	113.00
13	11,405	0.00	0.0		114.05

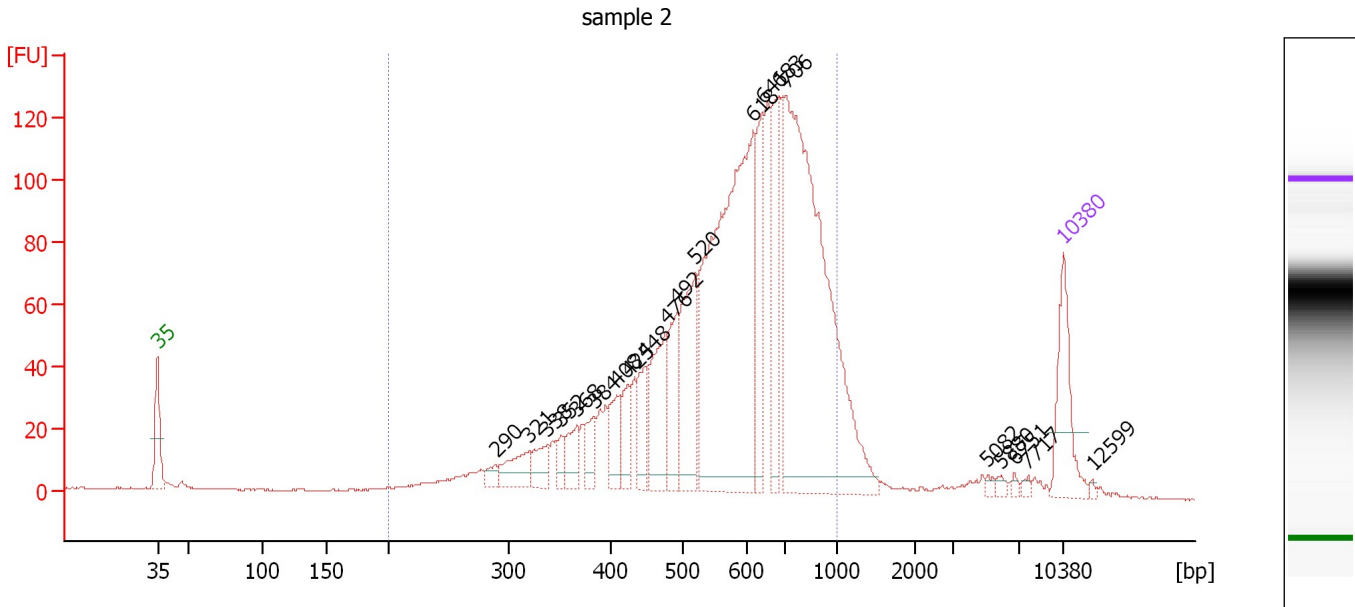
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	637	2,380.5	8,232.1	3,179.04	94	23.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
 Modified: 11/11/2015 9:34:14 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 21 Corr. Area 1: 1,938.9
 Noise: 0.2

Peak table for sample 2 : sample 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	290	15.94	83.4		69.16
3	321	49.46	233.8		71.74
4	338	37.11	166.2		73.15
5	352	19.27	82.9		74.24
6	368	38.52	158.8		75.46
7	384	31.70	125.2		76.73
8	408	44.33	164.4		78.50
9	425	46.29	165.2		79.41
10	448	56.59	191.4		80.72
11	476	115.60	367.9		82.31
12	492	74.11	228.2		83.21
13	520	149.74	436.5		84.62
14	618	585.31	1,434.5		89.06
15	641	116.37	275.1		89.74
16	683	115.59	256.3		91.01
17	706	695.56	1,491.9		91.60
18	5,082	4.86	1.4		107.15
19	5,880	4.84	1.2		108.15
20	6,751	4.01	0.9		109.24
21	7,717	4.47	0.9		110.28
22	10,380	75.00	10.9	Upper Marker	113.00
23	12,599	0.00	0.0		115.27


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
Modified: 11/11/2015 9:34:14 AM

Electropherogram Summary Continued ...

... Region table for sample 2 :

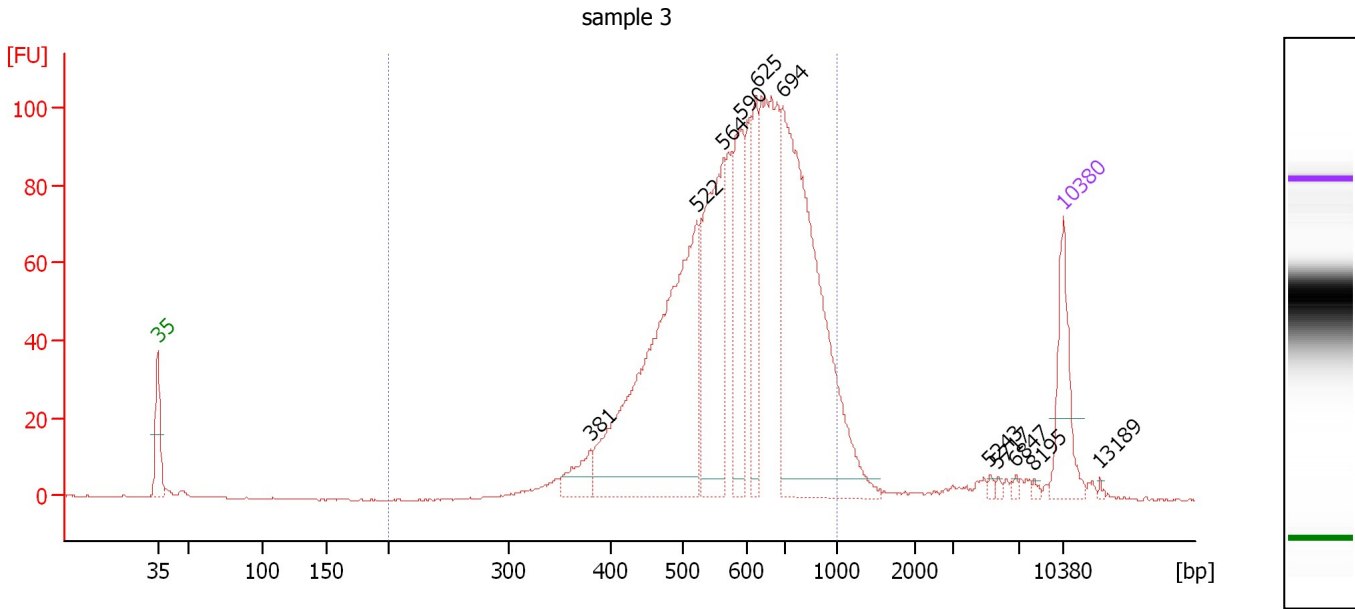
sample 2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	602	1,938.9	7,248.3	 2,523.16	90	27.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
 Modified: 11/11/2015 9:34:14 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 11 Corr. Area 1: 1,445.6
 Noise: 0.2

Peak table for sample 3 : sample 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	381	42.23	168.0		76.52
3	522	565.05	1,640.6		84.72
4	564	268.85	722.2		86.77
5	590	141.30	362.7		88.04
6	625	105.41	255.5		89.27
7	694	567.72	1,240.2		91.32
8	5,243	3.44	1.0		107.35
9	5,717	3.24	0.9		107.94
10	6,847	3.76	0.8		109.36
11	8,195	3.28	0.6		110.77
12	10,380	75.00	10.9	Upper Marker	113.00
13	13,189	0.00	0.0		115.87

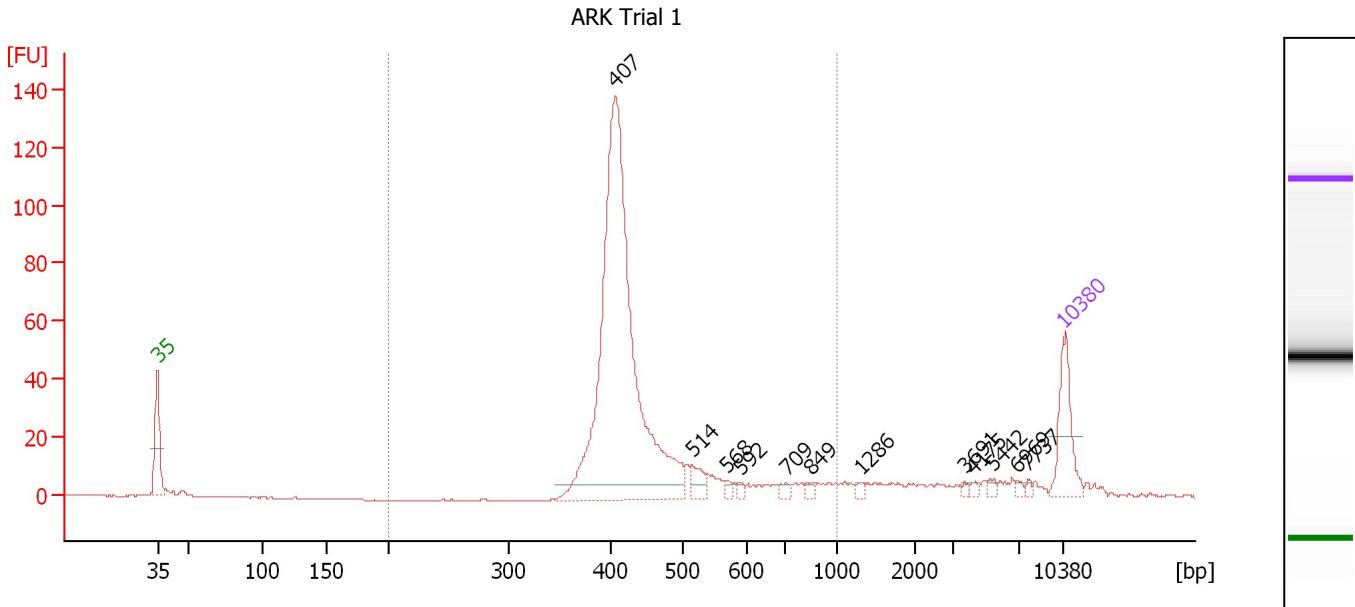
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	613	1,445.6	5,647.2	2,133.15	94	22.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
 Modified: 11/11/2015 9:34:14 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : ARK Trial 1

Number of peaks found: 12 Corr. Area 1: 563.9
 Noise: 0.2

Peak table for sample 4 : ARK Trial 1

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	407	994.94	3,703.6		78.42
3	514	29.41	86.7		84.33
4	568	7.61	20.3		86.98
5	592	7.22	18.5		88.15
6	709	9.67	20.7		91.64
7	849	8.00	14.3		93.55
8	1,286	5.52	6.5		97.32
9	3,691	3.97	1.6		105.41
10	4,175	4.82	1.8		106.02
11	5,442	5.95	1.7		107.60
12	6,969	4.93	1.1		109.51
13	7,737	3.98	0.8		110.30
14	10,380	75.00	10.9	Upper Marker	113.00

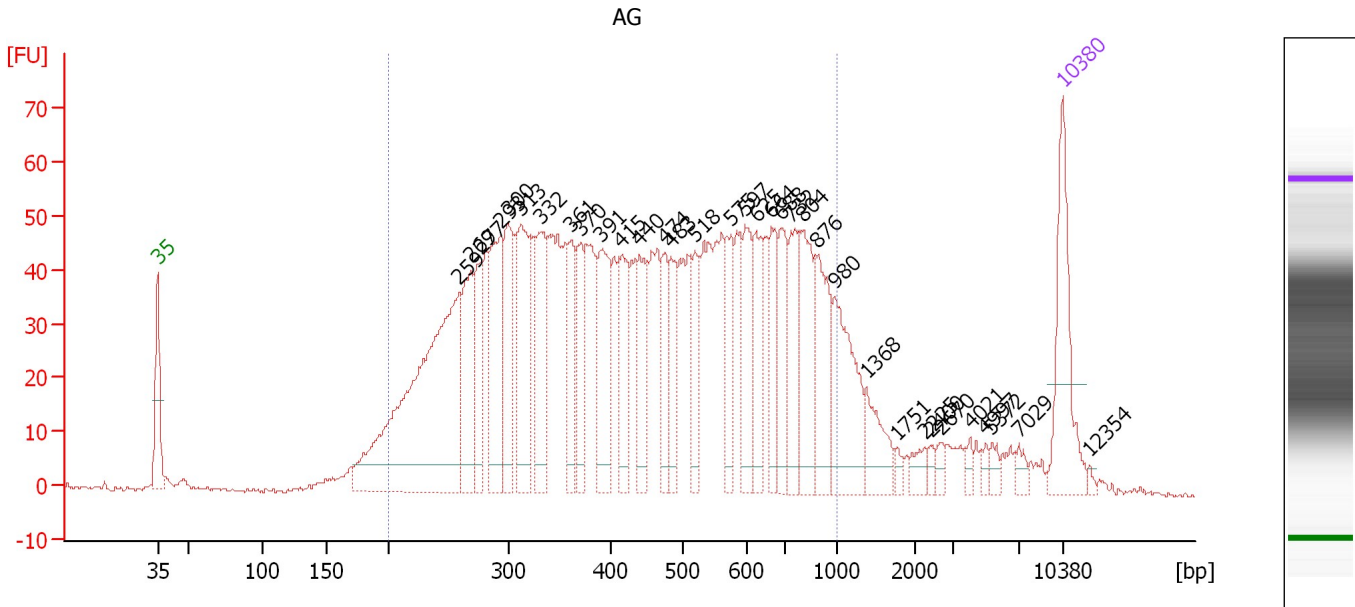
Region table for sample 4 : ARK Trial 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	450	563.9	3,847.8	1,098.04	86	22.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
 Modified: 11/11/2015 9:34:14 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : AG

Number of peaks found: 34 Corr. Area 1: 1,897.2
 Noise: 0.5

Peak table for sample 5 : AG

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	259	416.13	2,434.2		66.30
3	269	97.89	551.2		67.24
4	277	63.23	345.7		67.99
5	293	118.81	613.9		69.49
6	300	90.67	458.2		70.10
7	313	113.41	549.3		71.13
8	332	87.48	398.8		72.68
9	361	57.14	239.9		74.93
10	370	55.26	226.1		75.68
11	391	90.33	349.9		77.32
12	415	70.94	259.0		78.87
13	440	69.36	238.9		80.27
14	474	46.97	150.1		82.20
15	483	45.87	143.8		82.71
16	518	45.01	131.6		84.54
17	575	47.82	126.0		87.31
18	597	60.87	154.4		88.39
19	625	59.91	145.2		89.28
20	664	54.24	123.7		90.45
21	688	54.43	119.9		91.15
22	732	59.83	123.9		91.95
23	804	77.57	146.2		92.93
24	876	69.55	120.2		93.92
25	980	90.82	140.5		95.32

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
 Modified: 11/11/2015 9:34:14 AM

Electropherogram Summary Continued ...

... Peak table for sample 5 :

AG

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,368	37.44	41.5		97.81
27	1,751	5.27	4.6		100.11
28	2,225	11.16	7.6		102.26
29	2,400	5.59	3.5		102.78
30	2,670	6.73	3.8		103.58
31	4,021	5.75	2.2		105.83
32	4,997	5.75	1.7		107.05
33	5,372	7.27	2.1		107.51
34	7,029	7.53	1.6		109.58
35	10,380	75.00	10.9	Upper Marker	113.00
36	12,354	0.00	0.0		115.02

Region table for sample 5 :

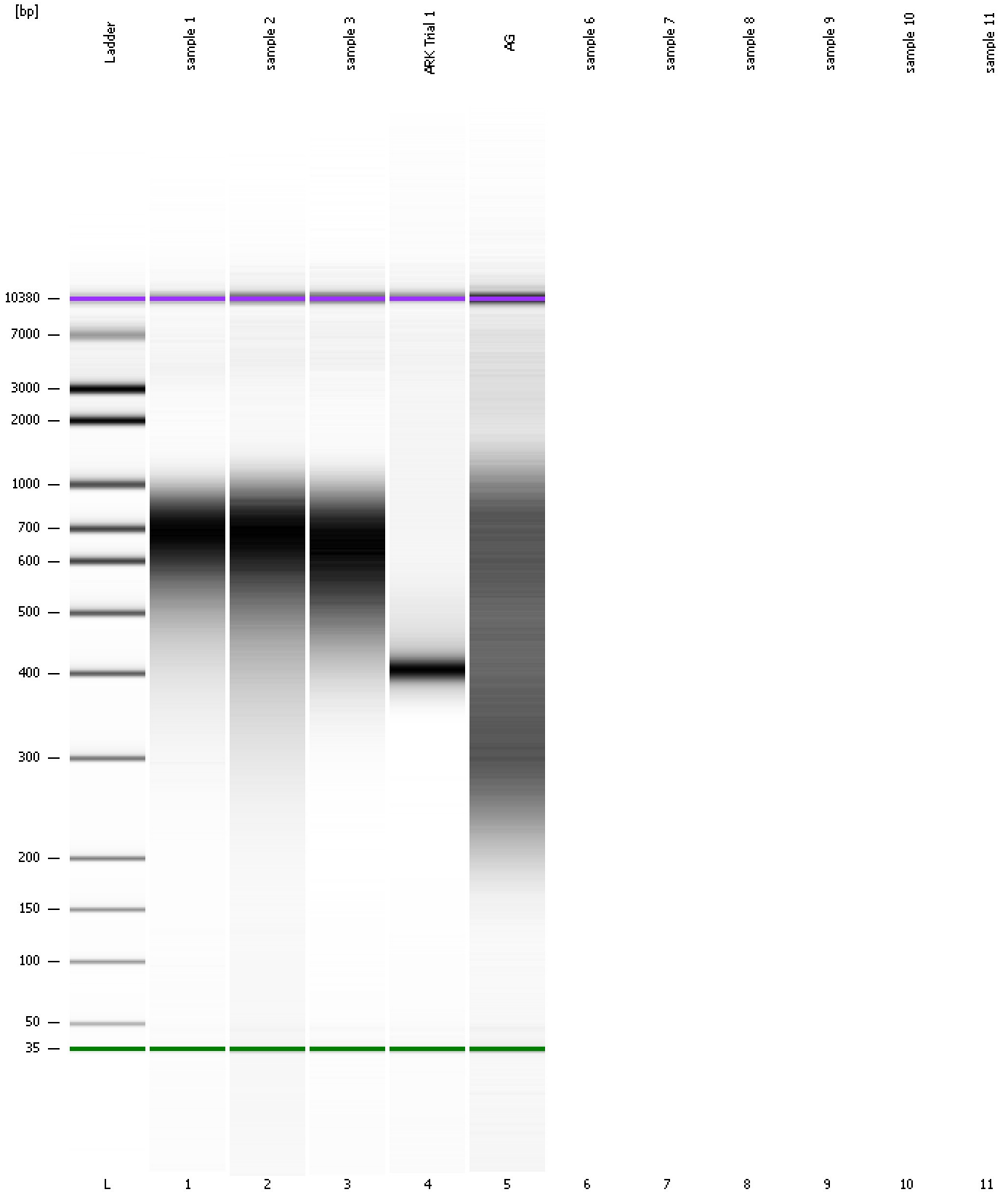
AG

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	470	1,897.2	11,205.2	2,792.38	88	40.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
Modified: 11/11/2015 9:34:14 AM

Gel Image

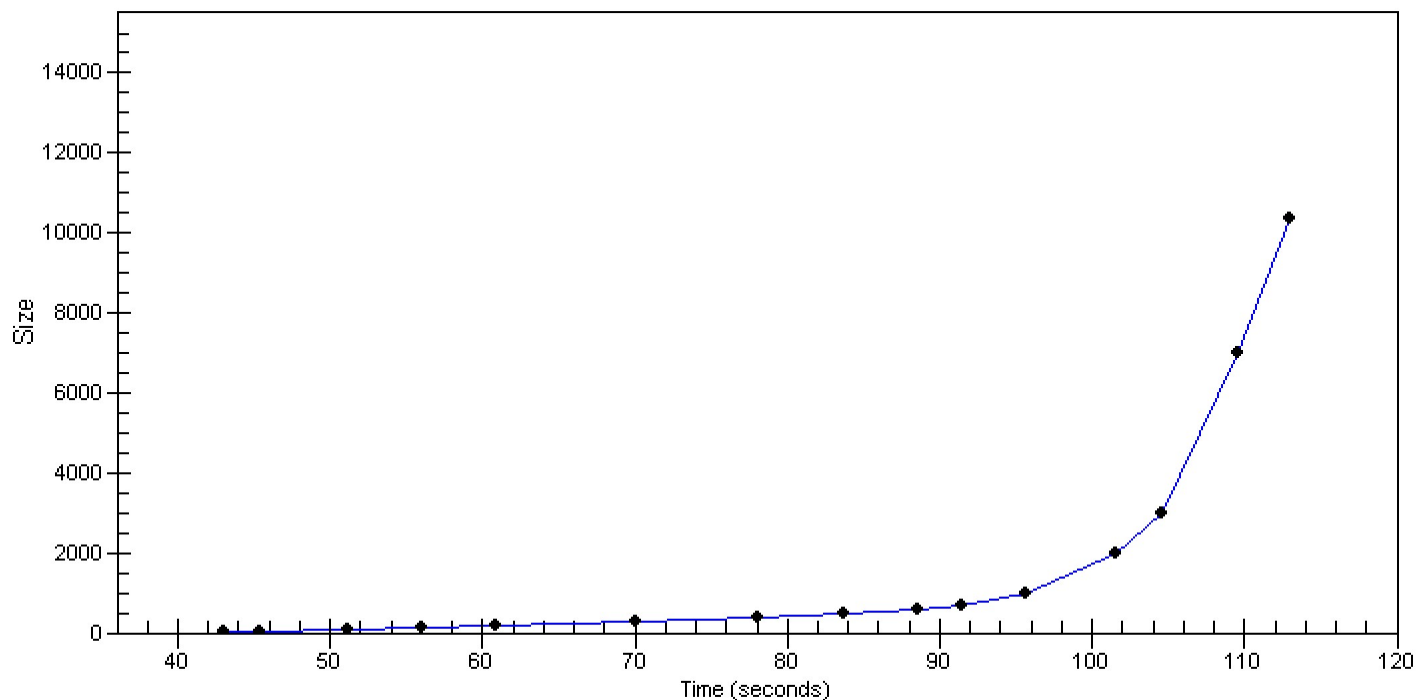


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
Modified: 11/11/2015 9:34:14 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
Modified: 11/11/2015 9:34:14 AM

Invalid Samples

Sample 6 has not been run, no results available.

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

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\2015-11-11\2015-11-11_002.xad

Created: 11/11/2015 9:00:45 AM
 Modified: 11/11/2015 9:34:14 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 6)		Instrument	Run		11/11/2015 9:24:53 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-11-11\2015-11-11_002.xad)		Instrument	Run		11/11/2015 9:00:50 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/11/2015 9:00:50 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/11/2015 9:00:50 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/11/2015 9:00:50 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/11/2015 9:00:50 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/11/2015 9:00:50 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/11/2015 9:00:50 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1