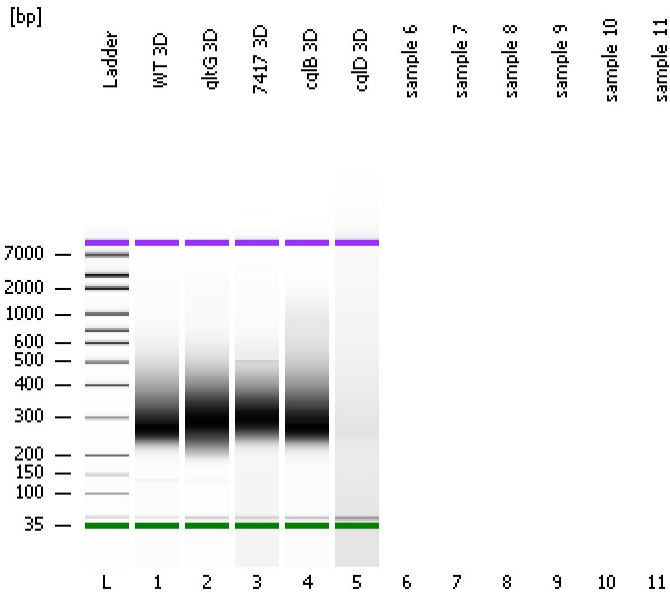


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
Modified: 5/25/2016 12:00:21 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

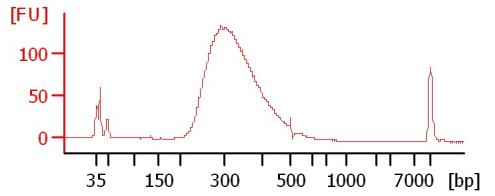
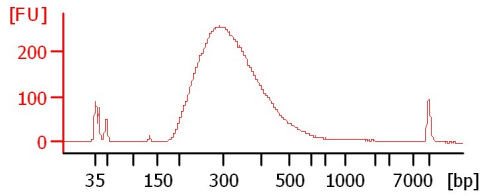
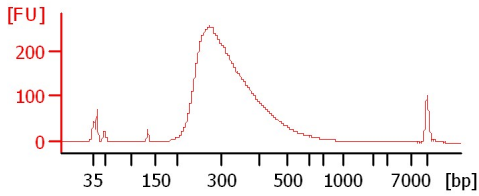
Chip Information:

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

WT 3D

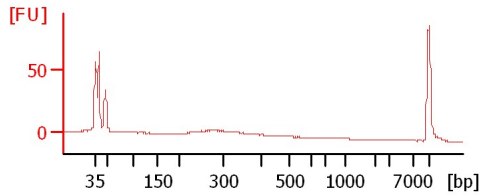
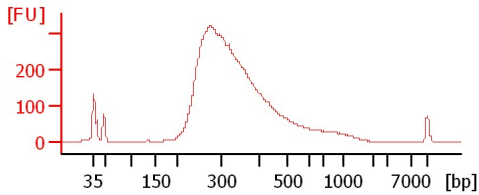
gltG 3D

7417 3D



cglB 3D

cglD 3D



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
 Modified: 5/25/2016 12:00:21 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WT 3D		<input type="checkbox"/>	✓			
gltG 3D		<input type="checkbox"/>	✓			
7417 3D		<input type="checkbox"/>	✓			
cglB 3D		<input type="checkbox"/>	✓			
cglD 3D		<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:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
Modified: 5/25/2016 12:00:21 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

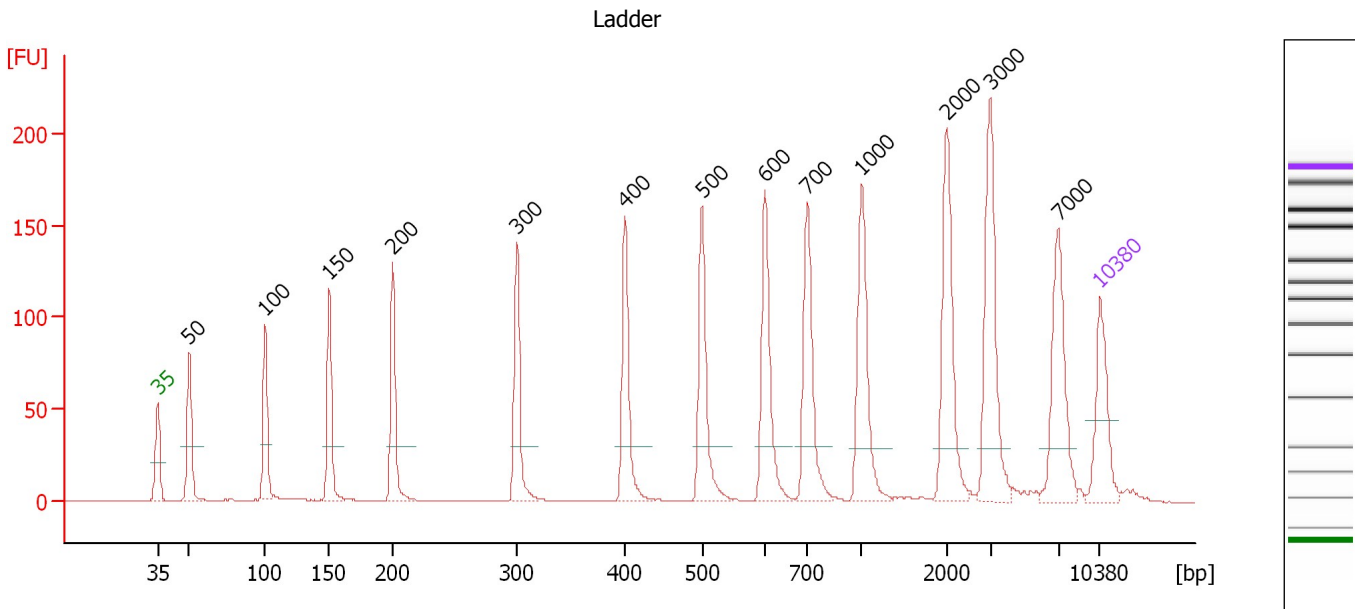
Ladder

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:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

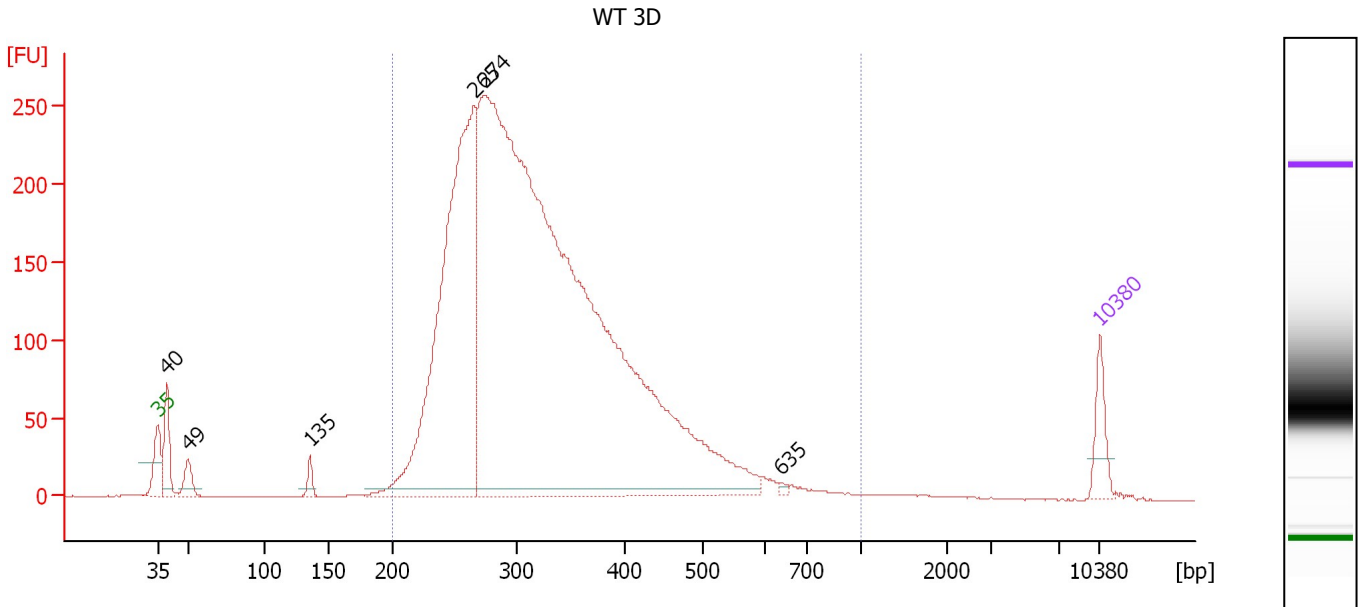
Peak table for Ladder

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	45.36
3	100	150.00	2,272.7	Ladder Peak	51.01
4	150	150.00	1,515.2	Ladder Peak	55.77
5	200	150.00	1,136.4	Ladder Peak	60.48
6	300	150.00	757.6	Ladder Peak	69.71
7	400	150.00	568.2	Ladder Peak	77.72
8	500	150.00	454.5	Ladder Peak	83.46
9	600	150.00	378.8	Ladder Peak	88.13
10	700	150.00	324.7	Ladder Peak	91.28
11	1,000	150.00	227.3	Ladder Peak	95.29
12	2,000	150.00	113.6	Ladder Peak	101.60
13	3,000	150.00	75.8	Ladder Peak	104.85
14	7,000	150.00	32.5	Ladder Peak	109.89
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
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Electropherogram Summary Continued ...



Overall Results for sample 1 : WT 3D

Number of peaks found: 6 Corr. Area 1: 4,631.8
 Noise: 0.2

Peak table for sample 1 : WT 3D

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	40	154.22	5,913.7		43.71
3	49	75.56	2,315.8		45.27
4	135	39.42	442.5		54.34
5	265	1,841.98	10,512.5		66.52
6	274	5,700.49	31,501.7		67.33
7	635	8.06	19.2		89.24
8	10,380	75.00	10.9	Upper Marker	113.00

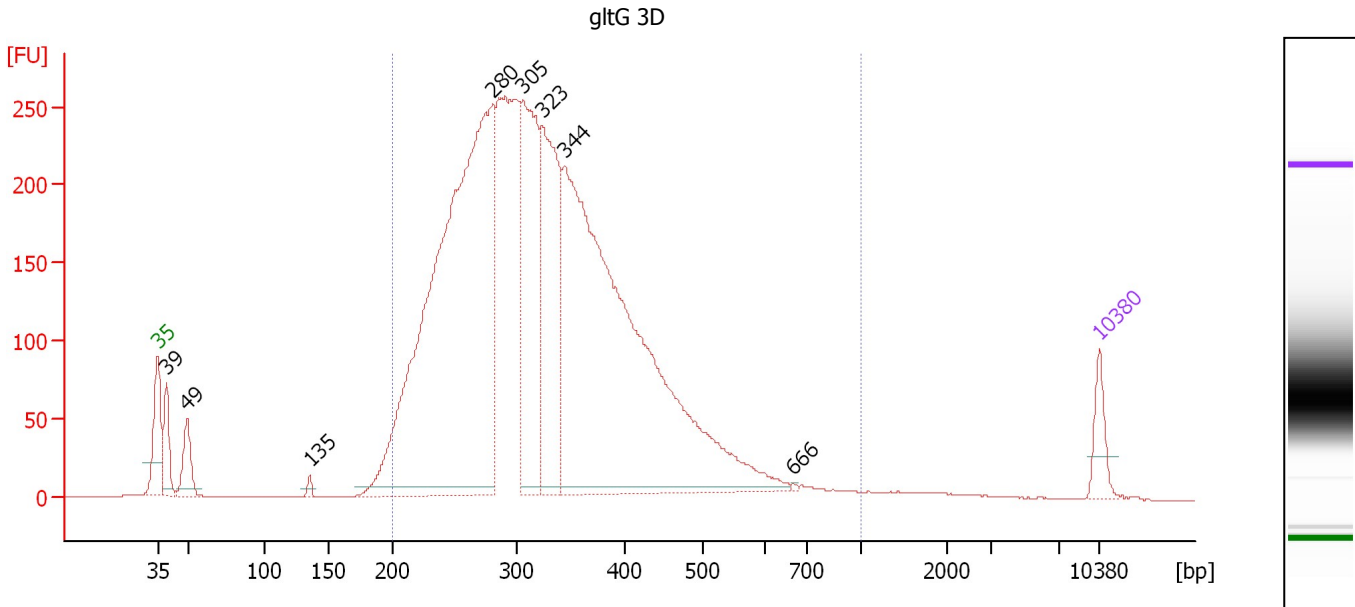
Region table for sample 1 : WT 3D

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	330	4,631.8	34,521.9	6,975.58	96	26.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
 Modified: 5/25/2016 12:00:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : gltG 3D

Number of peaks found: 8 Corr. Area 1: 5,650.0
 Noise: 0.1

Peak table for sample 2 : gltG 3D

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	39	168.11	6,495.6		43.66
3	49	160.94	4,992.1		45.17
4	135	20.21	227.6		54.30
5	280	3,083.41	16,685.8		67.86
6	305	832.32	4,131.2		70.13
7	323	797.25	3,740.2		71.55
8	344	2,821.22	12,418.4		73.25
9	666	4.12	9.4		90.22
10	10,380	75.00	10.9	Upper Marker	113.00

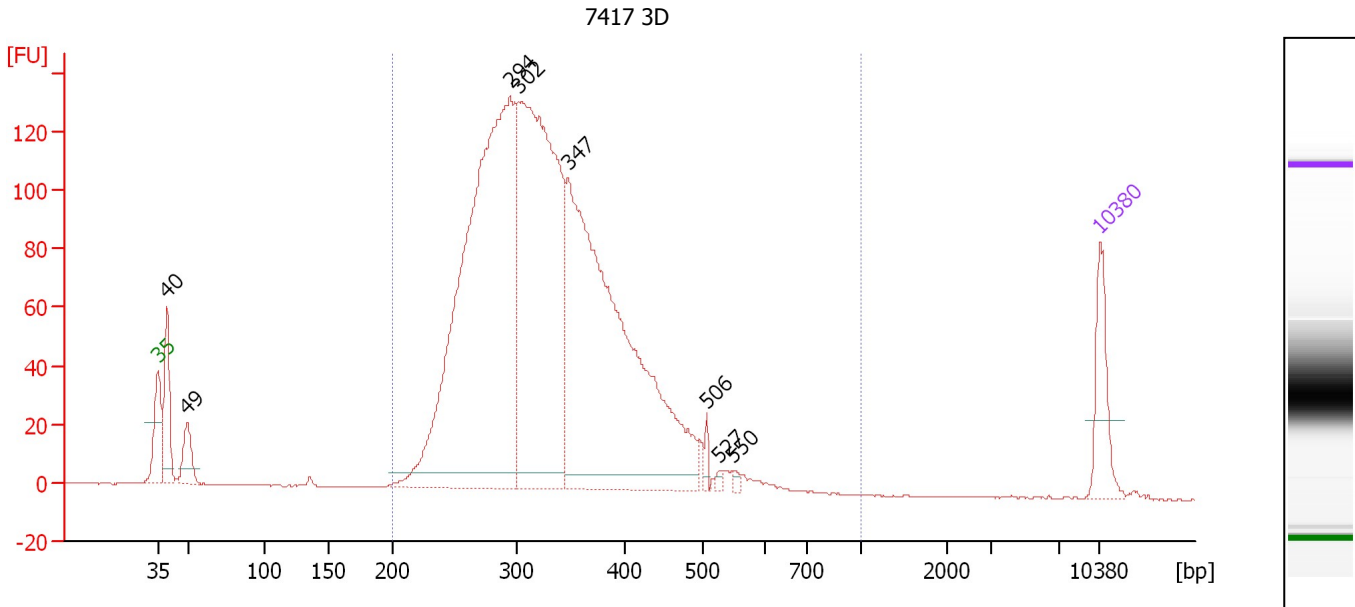
Region table for sample 2 : gltG 3D

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	332	5,650.0	43,068.5	8,717.45	95	27.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
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Electropherogram Summary Continued ...



Overall Results for sample 3 : 7417 3D

Number of peaks found: 8 Corr. Area 1: 2,328.2
 Noise: 0.1

Peak table for sample 3 : 7417 3D

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	40	139.42	5,339.4		43.72
3	49	69.87	2,160.9		45.20
4	294	1,431.01	7,371.8		69.17
5	302	1,015.80	5,103.6		69.83
6	347	1,132.88	4,939.8		73.51
7	506	14.75	44.2		83.73
8	527	6.55	18.8		84.73
9	550	6.64	18.3		85.78
10	10,380	75.00	10.9	Upper Marker	113.00

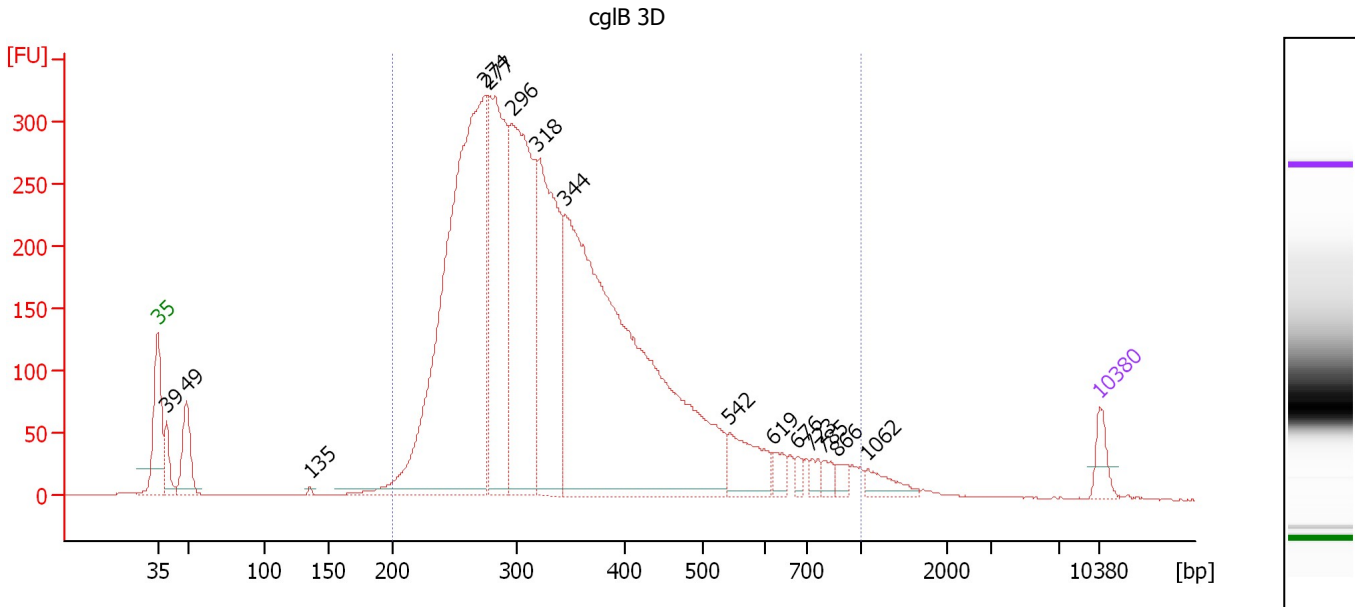
Region table for sample 3 : 7417 3D

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	332	2,328.2	17,225.0	3,597.64	95	20.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
 Modified: 5/25/2016 12:00:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : cgIB 3D

Number of peaks found: 15 Corr. Area 1: 6,516.4
 Noise: 0.2

Peak table for sample 4 : cgIB 3D

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	39	165.36	6,369.2		43.68
3	49	306.31	9,543.4		45.14
4	135	11.35	127.4		54.33
5	274	3,448.39	19,058.4		67.32
6	277	1,423.38	7,777.0		67.61
7	296	1,701.25	8,715.6		69.32
8	318	1,355.06	6,452.6		71.17
9	344	3,830.09	16,854.8		73.26
10	542	275.33	769.8		85.42
11	619	67.33	164.8		88.73
12	676	36.04	80.8		90.53
13	723	46.13	96.6		91.60
14	785	46.92	90.5		92.42
15	866	43.86	76.8		93.49
16	1,062	86.19	122.9		95.68
17	10,380	75.00	10.9	Upper Marker	113.00

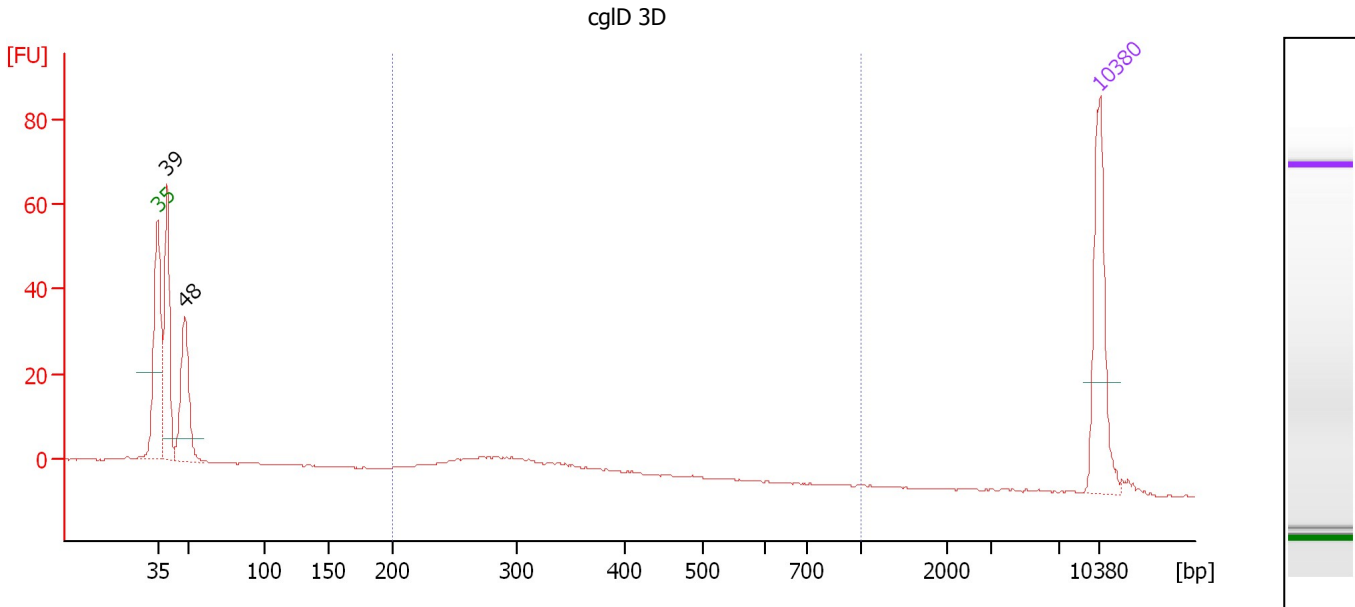
Region table for sample 4 : cgIB 3D

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	355	6,516.4	58,532.3	12,264.84	95	34.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
 Modified: 5/25/2016 12:00:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : cgID 3D

Number of peaks found: 2 Corr. Area 1: 63.4
 Noise: 0.2

Peak table for sample 5 : cgID 3D

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	39	137.42	5,288.9		43.69
3	48	109.93	3,485.2		45.01
4	10,380	75.00	10.9	Upper Marker	113.00

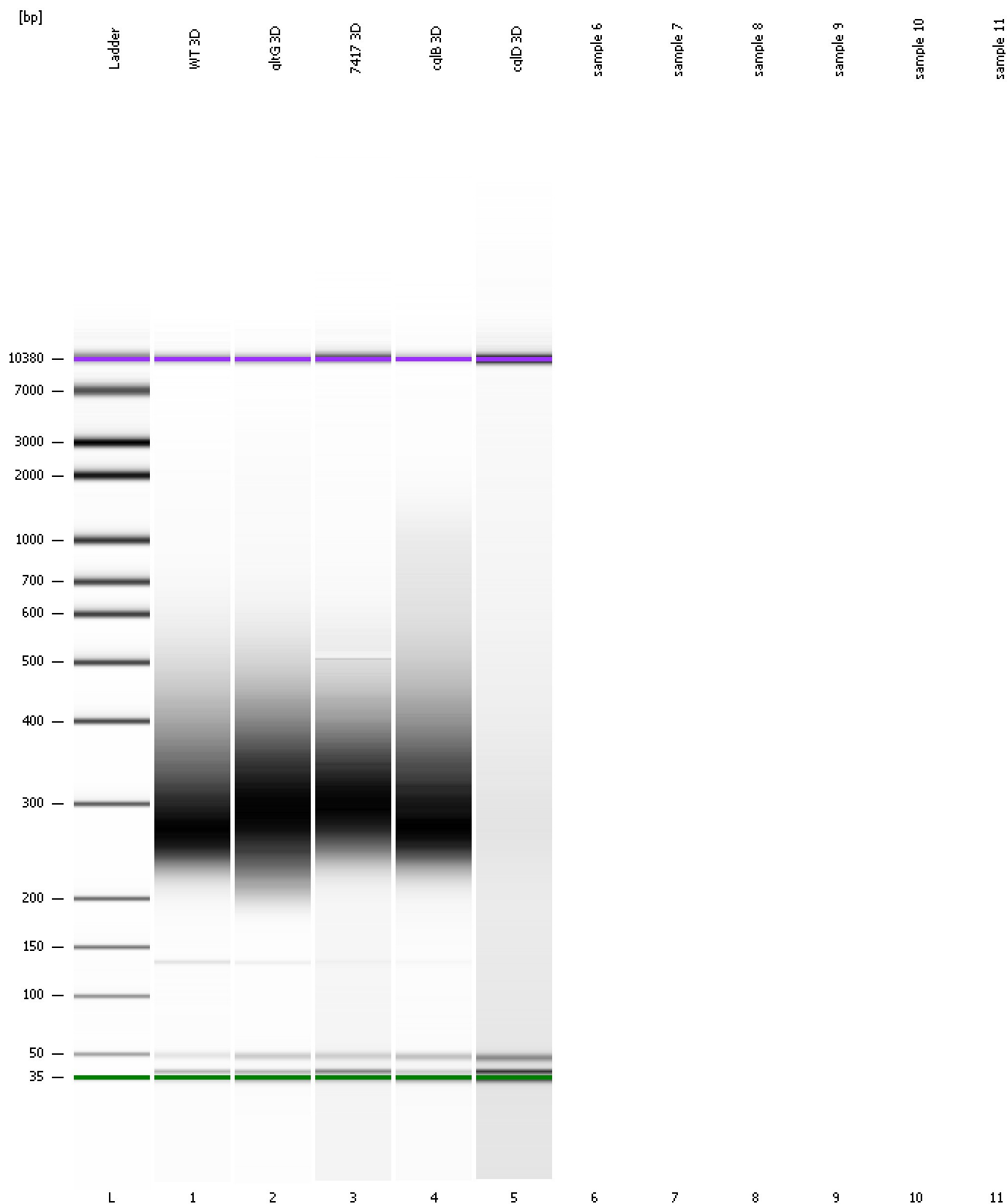
Region table for sample 5 : cgID 3D

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	311	63.4	481.3	94.23	30	20.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
Modified: 5/25/2016 12:00:21 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
Modified: 5/25/2016 12:00:21 PM

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:\... bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad

Created: 5/25/2016 11:36:06 AM
 Modified: 5/25/2016 12:00:21 PM

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		5/25/2016 12:00:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-05-25\2016-05-25_002.xad)		Instrument	Run		5/25/2016 11:36:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/25/2016 11:36:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/25/2016 11:36:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/25/2016 11:36:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/25/2016 11:36:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/25/2016 11:36:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/25/2016 11:36:12 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1