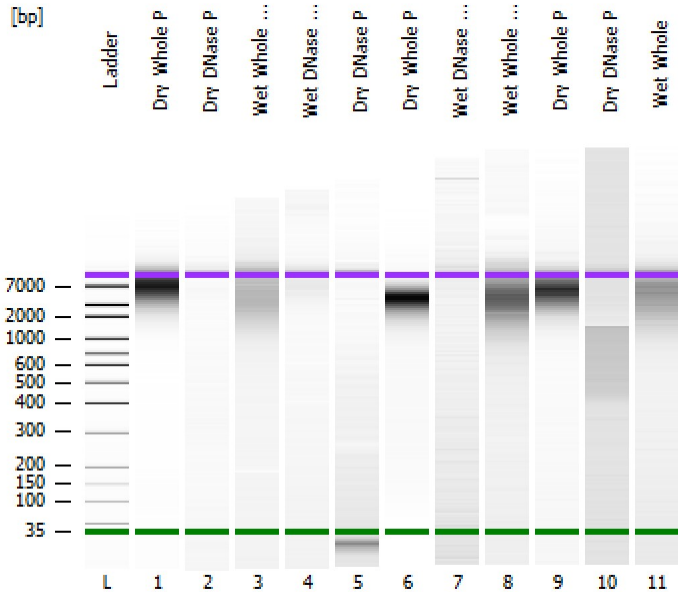


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
Modified: 2/7/2020 12:56:07 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

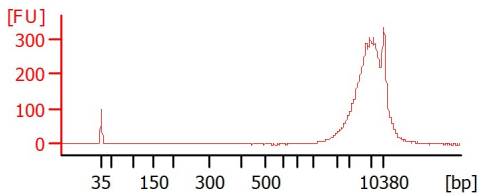
Assay Information:

Assay Origin Path: C:\Program Files (x86)\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

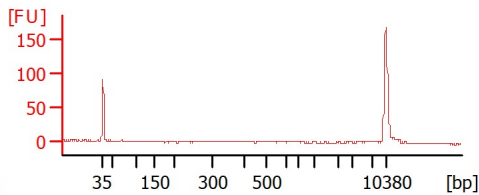
Chip Information:

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

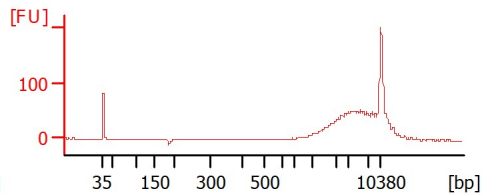
Dry Whole PS 1



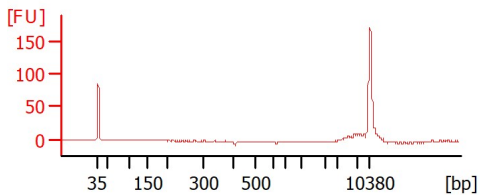
Dry DNase PS 1



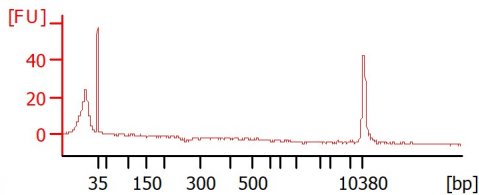
Wet Whole PS 1



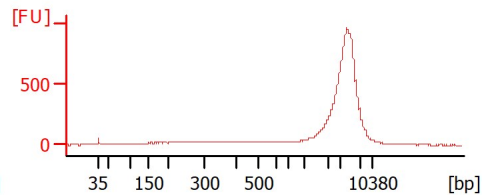
Wet DNase PS 1



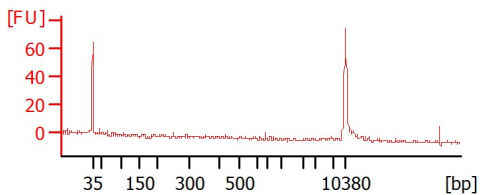
Dry DNase PC 1



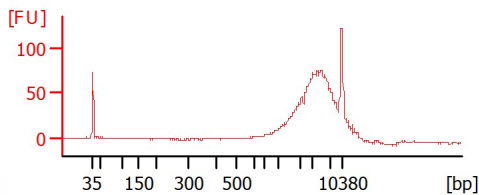
Dry Whole PC 1



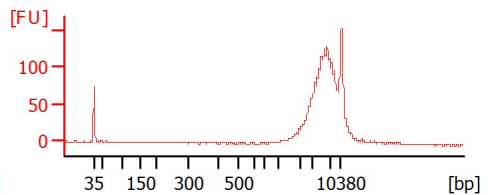
Wet DNase PC 1



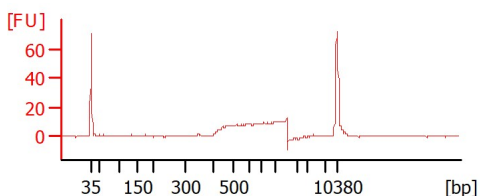
Wet Whole PC 1



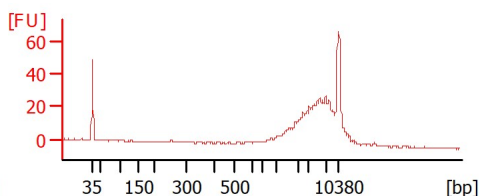
Dry Whole PS 2



Dry DNase PS 2



Wet Whole PS2



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Dry Whole PS 1		<input type="checkbox"/>	✓			
Dry DNase PS 1		<input type="checkbox"/>	✓			
Wet Whole PS 1		<input type="checkbox"/>	✓			
Wet DNase PS 1		<input type="checkbox"/>	✓			
Dry DNase PC 1		<input type="checkbox"/>	✓			
Dry Whole PC 1		<input type="checkbox"/>	✓			
Wet DNase PC 1		<input type="checkbox"/>	✓			
Wet Whole PC 1		<input type="checkbox"/>	✓			
Dry Whole PS 2		<input type="checkbox"/>	✓			
Dry DNase PS 2		<input type="checkbox"/>	✓			
Wet Whole PS2		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 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

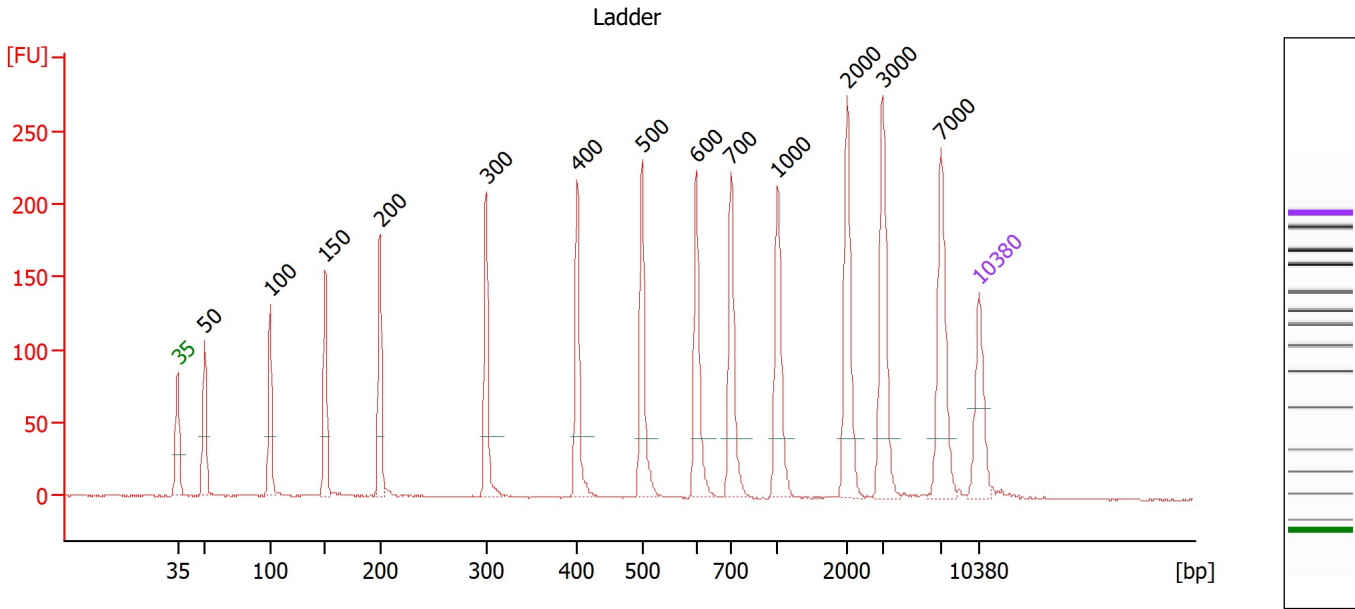
Ladder

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: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.5

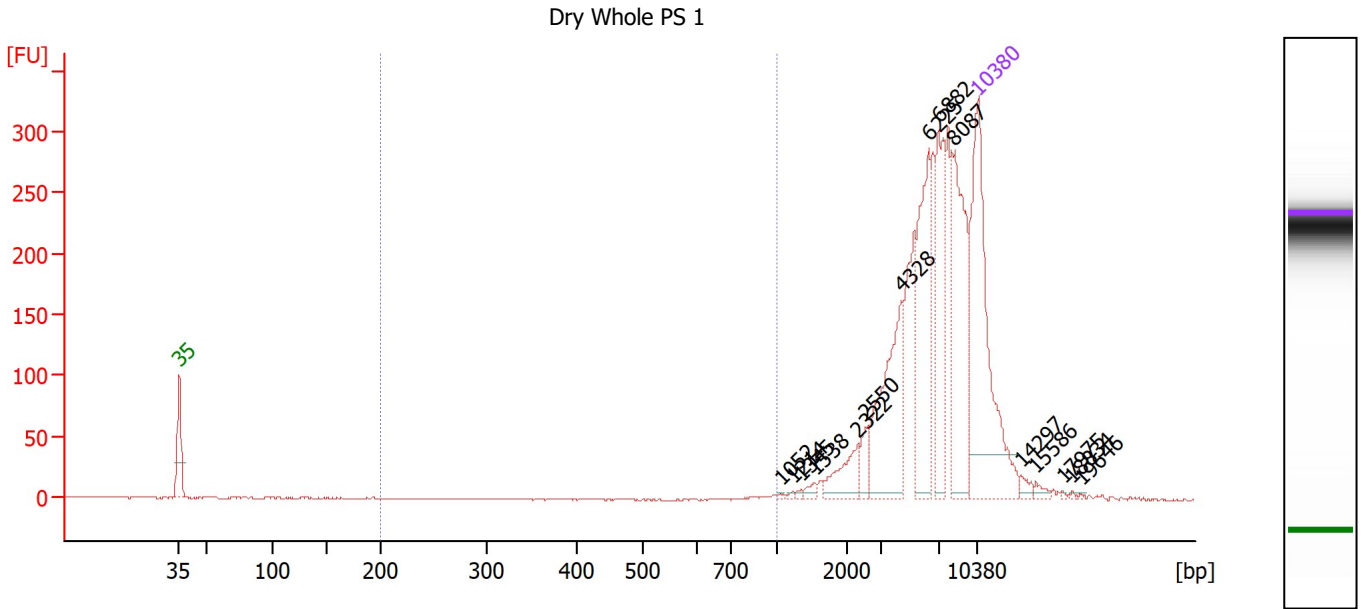
Peak table for Ladder

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	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Dry Whole PS 1

Number of peaks found: 15 Corr. Area 1: 6.9
 Noise: 0.5

Peak table for sample 1 : Dry Whole PS 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,052	0.55	0.8	
3	1,214	0.67	0.8	
4	1,345	0.84	1.0	
5	1,538	2.13	2.1	
6	2,322	13.05	8.5	
7	2,550	6.02	3.6	
8	4,328	47.11	16.5	
9	6,225	51.03	12.4	
10	6,882	37.23	8.2	
11	8,087	52.72	9.9	
12	10,380	75.00	10.9	Upper Marker
13	14,297	0.00	0.0	
14	15,586	0.00	0.0	
15	17,975	0.00	0.0	
16	18,834	0.00	0.0	
17	19,646	0.00	0.0	

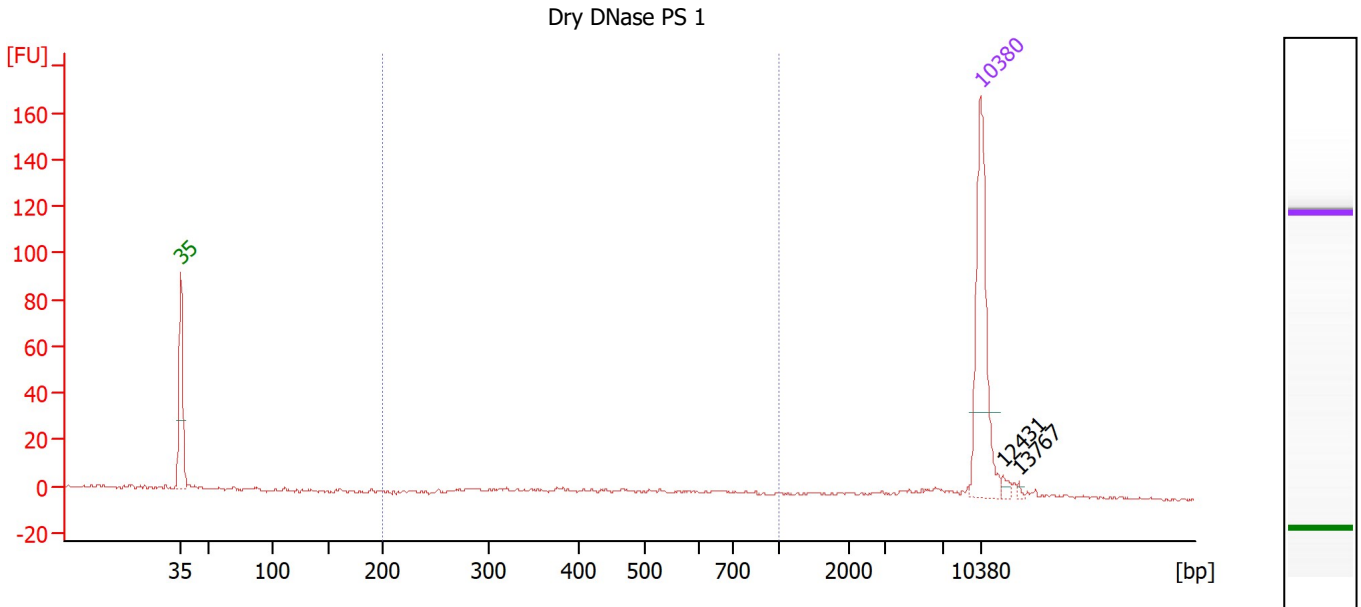
Region table for sample 1 : Dry Whole PS 1

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	6.9	0	878	12.6	1.20	2.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Dry DNase PS 1

Number of peaks found: 2 Corr. Area 1: 38.9
 Noise: 0.7

Peak table for sample 2 : Dry DNase PS 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,431	0.00	0.0	
4	13,767	0.00	0.0	

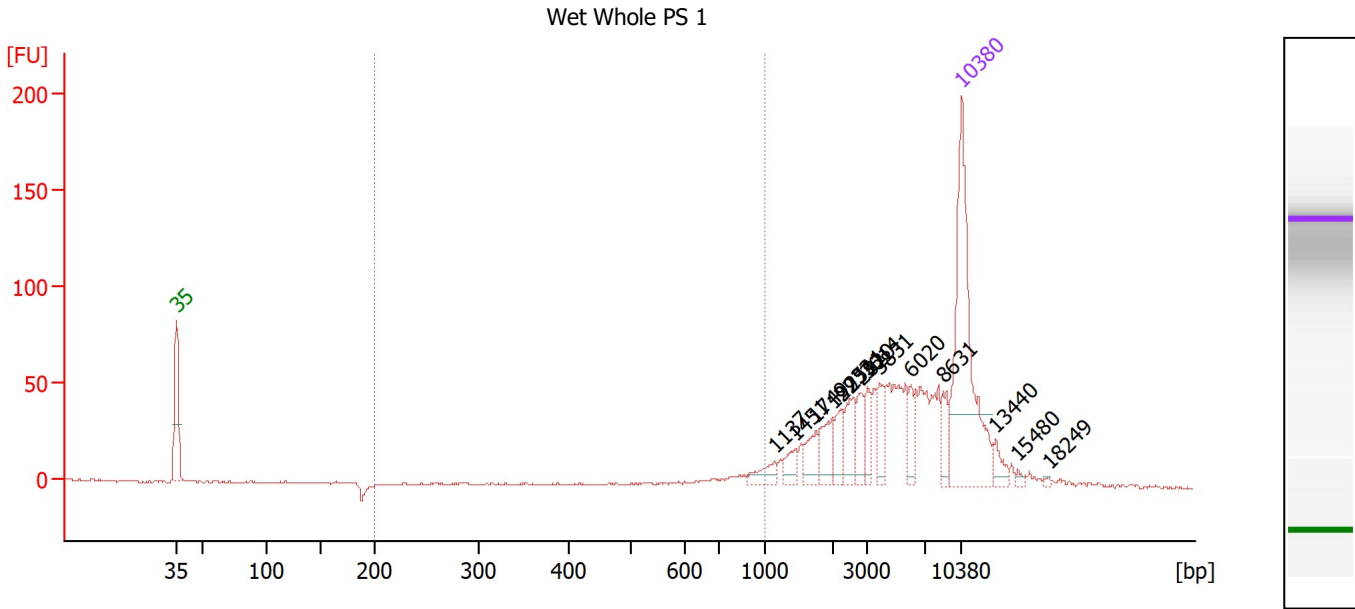
Region table for sample 2 : Dry DNase PS 1

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	38.9	39	489	34.9	25.77	93.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Wet Whole PS 1

Number of peaks found: 14 Corr. Area 1: 29.6
 Noise: 0.6

Peak table for sample 3 : Wet Whole PS 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,137	7.26	9.7	
3	1,451	6.53	6.8	
4	1,749	9.96	8.6	
5	1,993	12.72	9.7	
6	2,233	9.88	6.7	
7	2,511	13.05	7.9	
8	2,820	10.16	5.5	
9	3,014	8.56	4.3	
10	3,831	11.91	4.7	
11	6,020	10.02	2.5	
12	8,631	8.81	1.5	
13	10,380	75.00	10.9	Upper Marker
14	13,440	0.00	0.0	
15	15,480	0.00	0.0	
16	18,249	0.00	0.0	

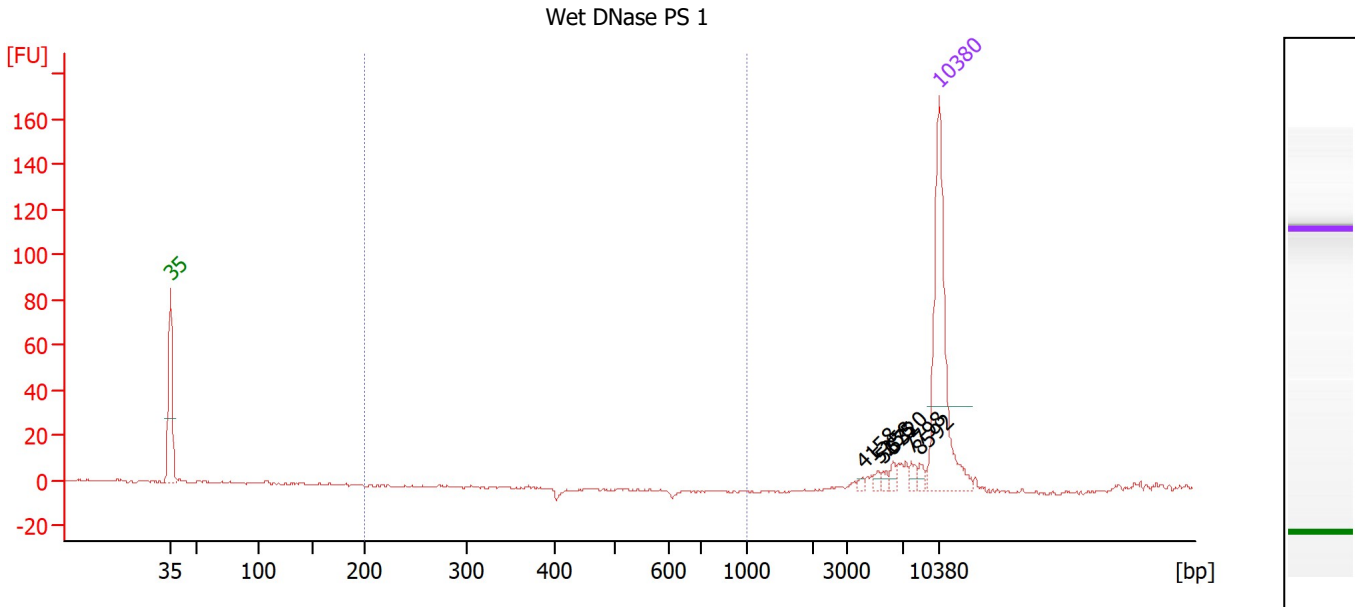
Region table for sample 3 : Wet Whole PS 1

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	29.6	4	812	16.3	10.40	20.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Wet DNase PS 1

Number of peaks found: 6 Corr. Area 1: 0.0
 Noise: 0.6

Peak table for sample 4 : Wet DNase PS 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	4,158	1.40	0.5	
3	5,258	2.01	0.6	
4	5,675	2.20	0.6	
5	6,320	2.99	0.7	
6	7,798	3.69	0.7	
7	8,592	2.98	0.5	
8	10,380	75.00	10.9	Upper Marker

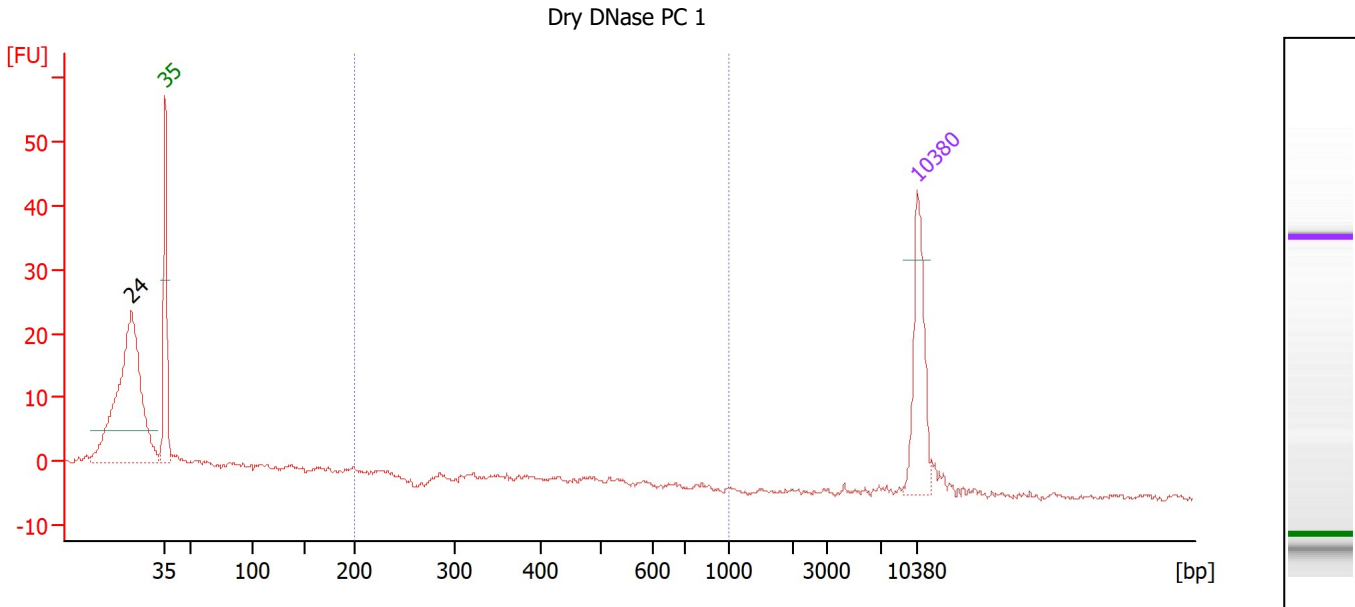
Region table for sample 4 : Wet DNase PS 1

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	0.0	0	0	0.0	0.00	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Dry DNase PC 1

Number of peaks found: 1 Corr. Area 1: 0.9
 Noise: 0.4

Peak table for sample 5 : Dry DNase PC 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	24	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	10,380	75.00	10.9	Upper Marker

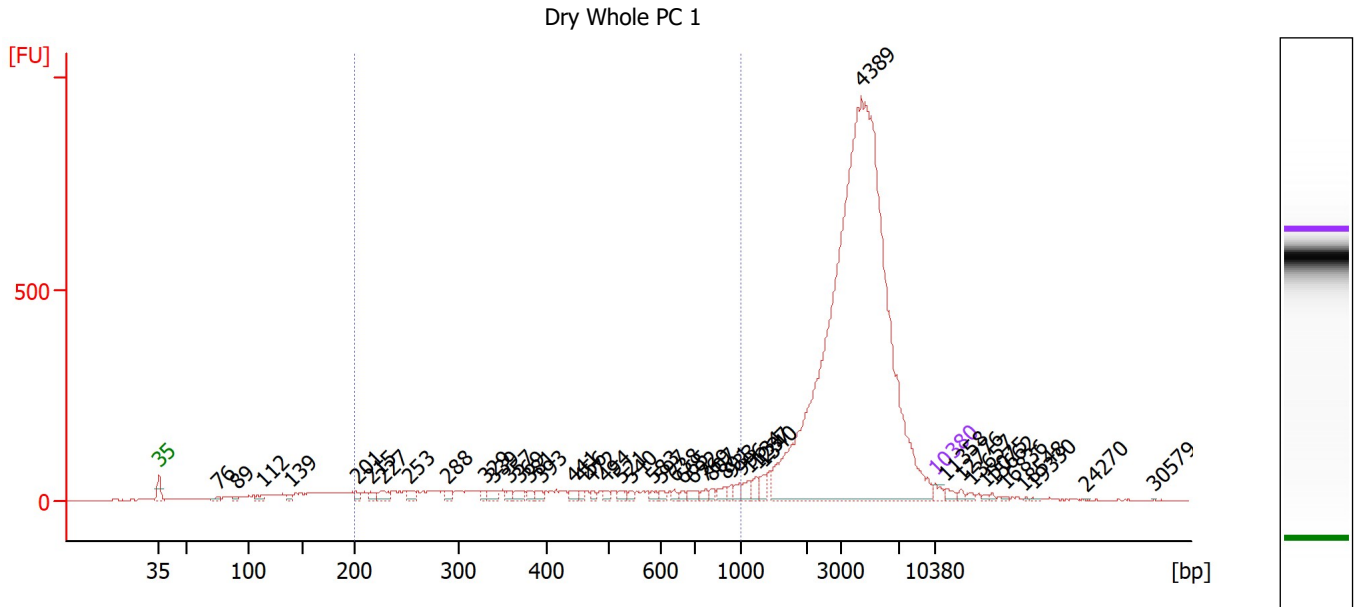
Region table for sample 5 : Dry DNase PC 1

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	0.9	1	398	30.5	2.02	9.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Dry Whole PC 1

Number of peaks found: 45 Corr. Area 1: 1,064.4
 Noise: 0.8

Peak table for sample 6 : Dry Whole PC 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	76	60.84	1,219.0	
3	89	54.61	925.4	
4	112	81.59	1,101.0	
5	139	76.62	833.9	
6	201	90.22	679.8	
7	215	107.45	757.1	
8	227	168.11	1,120.0	
9	253	104.47	626.3	
10	288	82.12	431.5	
11	329	69.35	319.3	
12	339	123.66	553.2	
13	357	70.43	298.6	
14	369	116.31	477.9	
15	381	67.98	270.5	
16	393	77.89	300.0	
17	441	82.42	283.3	
18	456	58.25	193.6	
19	472	59.82	192.0	
20	494	74.85	229.5	
21	521	79.85	232.1	
22	540	57.57	161.4	
23	583	57.79	150.2	
24	597	50.11	127.2	
25	638	48.87	116.1	
26	665	49.60	113.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...

... Peak table for sample 6 : Dry Whole PC 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	692	94.85	207.8	
28	769	62.75	123.7	
29	807	53.58	100.6	
30	891	87.72	149.1	
31	933	65.97	107.1	
32	996	75.78	115.2	
33	1,134	100.46	134.2	
34	1,237	118.41	145.1	
35	1,340	102.64	116.1	
36	4,389	13,108.28	4,525.1	
37	10,380	75.00	10.9	Upper Marker
38	11,358	0.00	0.0	
39	12,776	0.00	0.0	
40	13,657	0.00	0.0	
41	15,075	0.00	0.0	
42	15,662	0.00	0.0	
43	16,836	0.00	0.0	
44	18,548	0.00	0.0	
45	19,330	0.00	0.0	
46	24,270	0.00	0.0	
47	30,579	0.00	0.0	

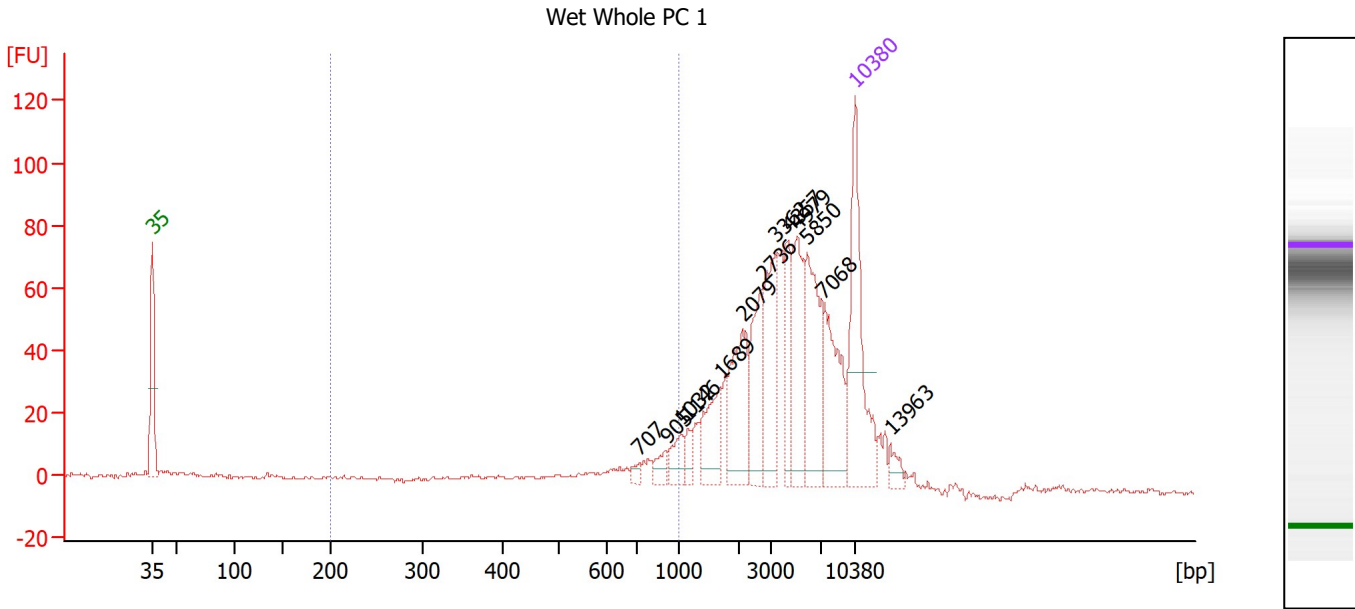
Region table for sample 6 : Dry Whole PC 1

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,064.4	15	470	44.7	3,566.35	15,005.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Wet Whole PC 1

Number of peaks found: 13 Corr. Area 1: 107.6
 Noise: 0.6

Peak table for sample 8 : Wet Whole PC 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	707	4.95	10.6	
3	905	8.79	14.7	
4	1,032	14.37	21.1	
5	1,146	7.89	10.4	
6	1,689	31.24	28.0	
7	2,079	49.32	35.9	
8	2,736	40.84	22.6	
9	3,362	54.17	24.4	
10	4,357	29.44	10.2	
11	4,979	50.12	15.3	
12	5,850	60.70	15.7	
13	7,068	56.87	12.2	
14	10,380	75.00	10.9	Upper Marker
15	13,963	0.00	0.0	

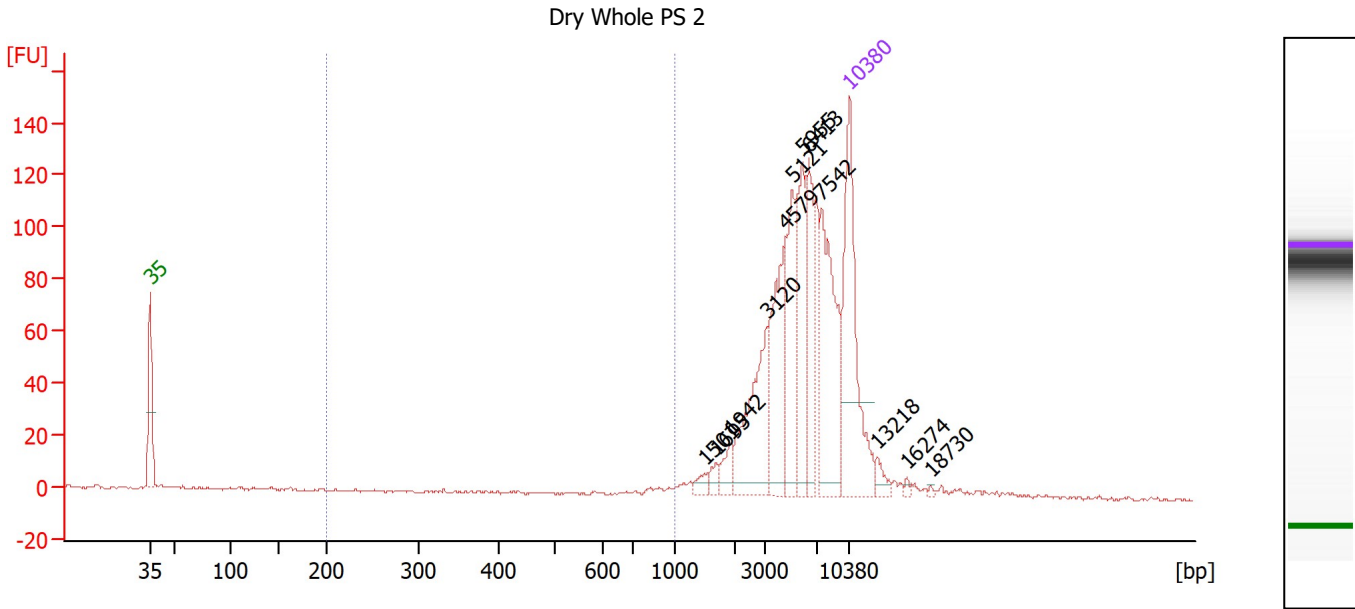
Region table for sample 8 : Wet Whole PC 1

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	107.6	11	651	33.4	75.90	222.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Dry Whole PS 2

Number of peaks found: 12 Corr. Area 1: 7.7
 Noise: 0.5

Peak table for sample 9 : Dry Whole PS 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,501	4.39	4.4	
3	1,695	4.94	4.4	
4	1,942	8.41	6.6	
5	3,120	52.87	25.7	
6	4,579	54.40	18.0	
7	5,121	42.03	12.4	
8	5,955	45.93	11.7	
9	6,413	38.82	9.2	
10	7,542	69.98	14.1	
11	10,380	75.00	10.9	Upper Marker
12	13,218	0.00	0.0	
13	16,274	0.00	0.0	
14	18,730	0.00	0.0	

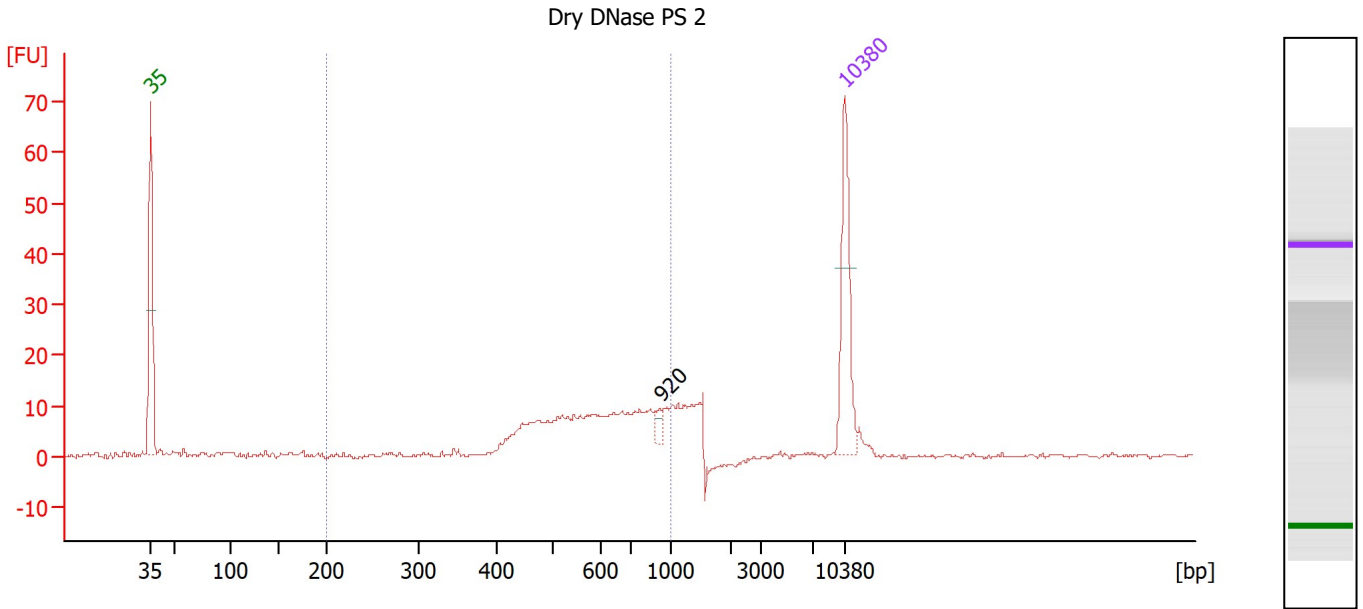
Region table for sample 9 : Dry Whole PS 2

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	7.7	1	810	21.6	3.70	7.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Dry DNase PS 2

Number of peaks found: 1 Corr. Area 1: 150.8
 Noise: 0.3

Peak table for sample 10 : Dry DNase PS 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	920	8.09	13.3	
3	10,380	75.00	10.9	Upper Marker

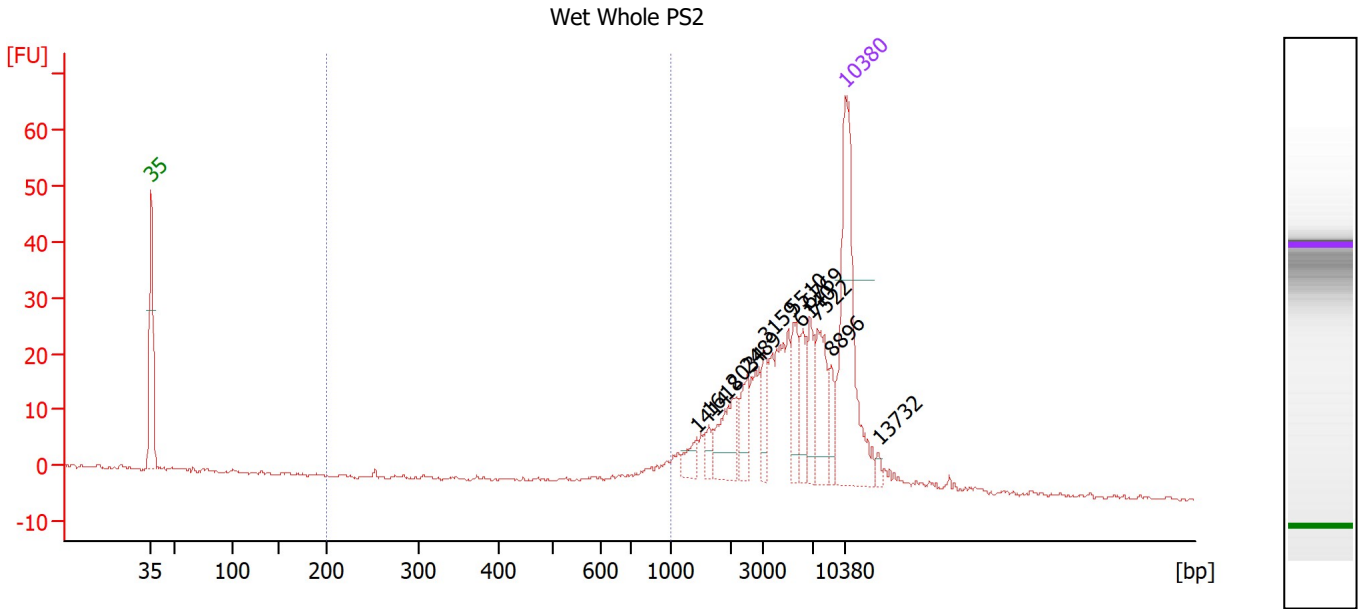
Region table for sample 10 : Dry DNase PS 2

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	150.8	71	622	26.7	259.86	699.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Wet Whole PS2

Number of peaks found: 11 Corr. Area 1: 18.5
 Noise: 0.3

Peak table for sample 11 : Wet Whole PS2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,414	7.68	8.2	
3	1,618	5.96	5.6	
4	2,034	23.90	17.8	
5	2,489	14.09	8.6	
6	3,159	12.51	6.0	
7	5,510	18.02	5.0	
8	6,140	14.06	3.5	
9	6,769	16.69	3.7	
10	7,522	26.53	5.3	
11	8,896	10.06	1.7	
12	10,380	75.00	10.9	Upper Marker
13	13,732	0.00	0.0	

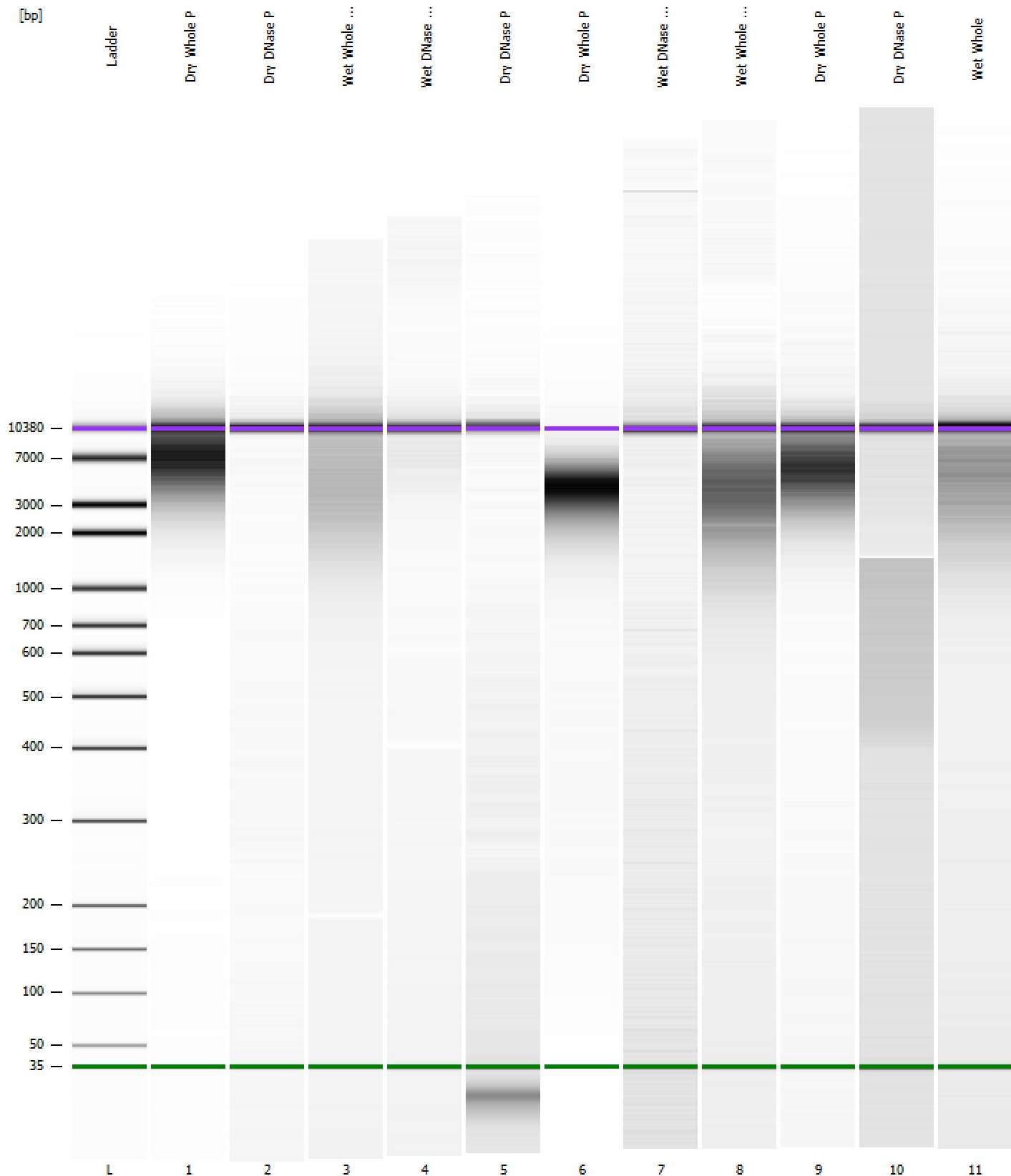
Region table for sample 11 : Wet Whole PS2

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	18.5	6	767	22.1	18.47	40.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-02-07_001.xad

Created: 2/7/2020 12:06:53 PM
 Modified: 2/7/2020 12:56:07 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		2/7/2020 12:48:11 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-02-07\Bioanalyze r1_High Sensitivity DNA Assay_2020-02-07_001.xad)		Instrument	Run		2/7/2020 12:06:58 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		2/7/2020 12:06:58 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		2/7/2020 12:06:58 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		2/7/2020 12:06:58 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		2/7/2020 12:06:58 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		2/7/2020 12:06:58 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		2/7/2020 12:06:58 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB