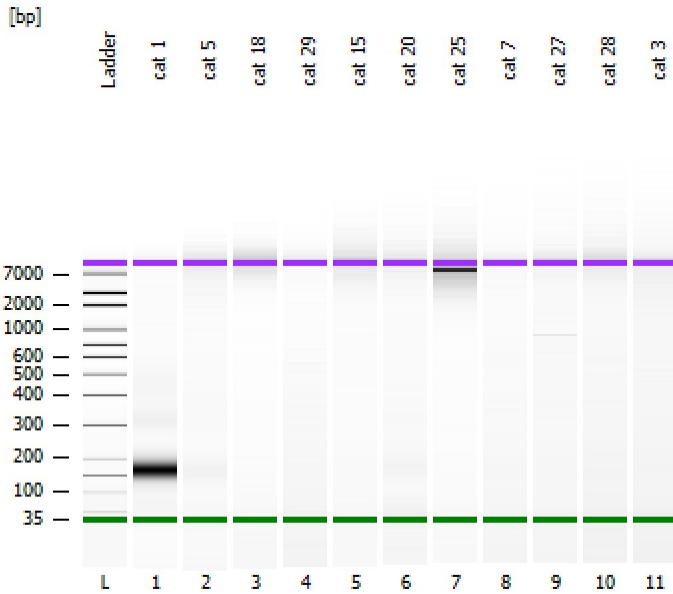


Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
Modified: 2/13/2020 3:13:57 PM

**Electrophoresis File Run Summary**



Instrument Information:

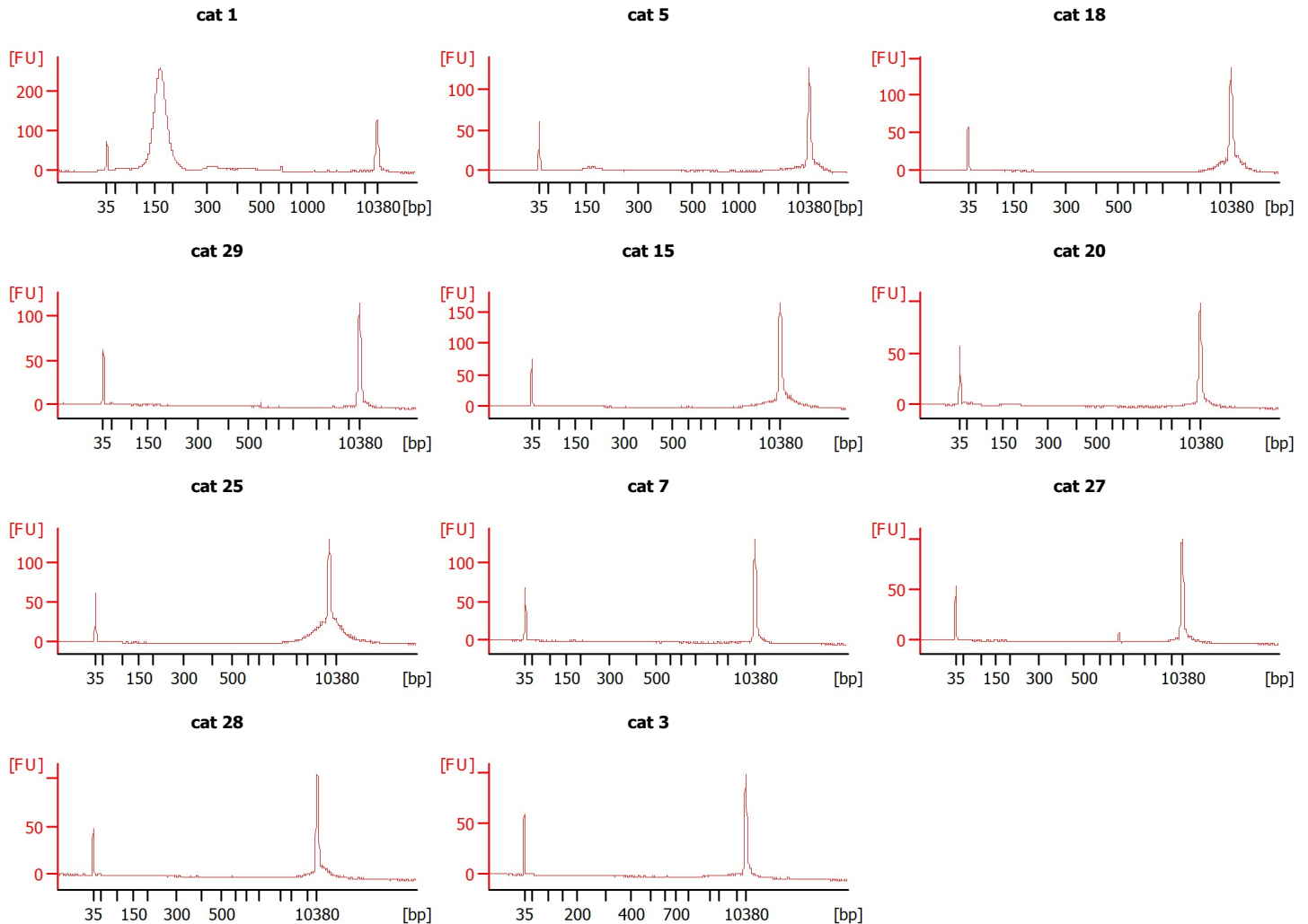
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
cat 1		<input type="checkbox"/>				
cat 5		<input type="checkbox"/>				
cat 18		<input type="checkbox"/>				
cat 29		<input type="checkbox"/>				
cat 15		<input type="checkbox"/>				
cat 20		<input type="checkbox"/>				
cat 25		<input type="checkbox"/>				
cat 7		<input type="checkbox"/>				
cat 27		<input type="checkbox"/>				
cat 28		<input type="checkbox"/>				
cat 3		<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\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 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

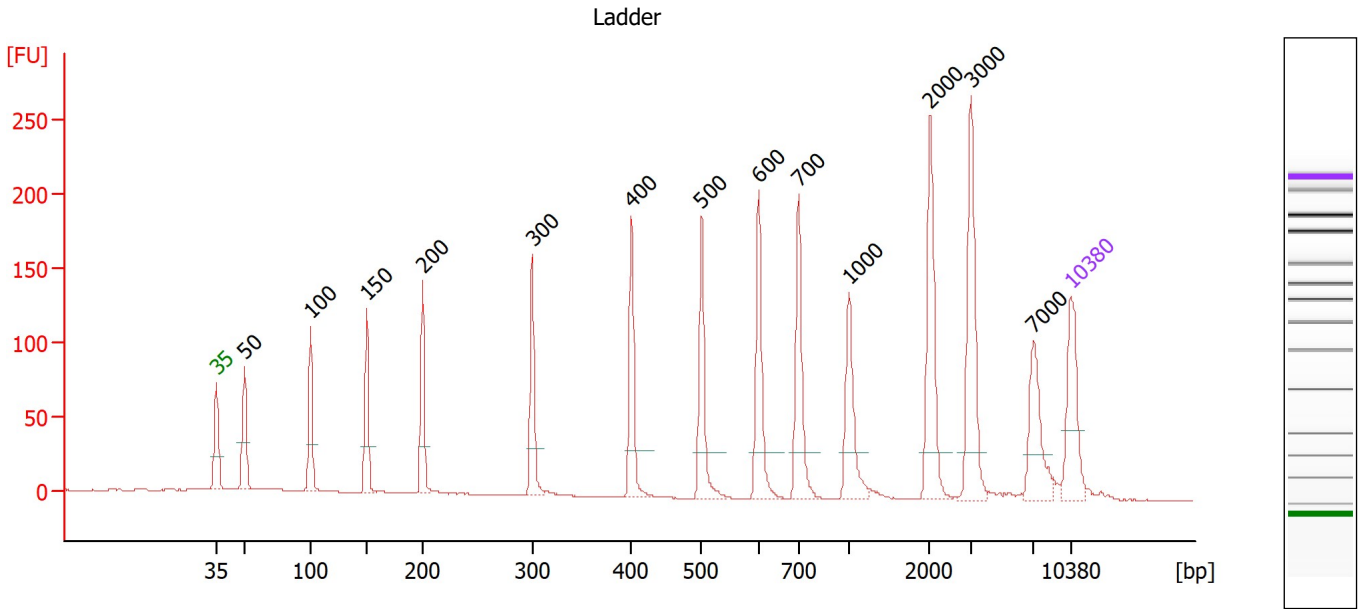
**Ladder**

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\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

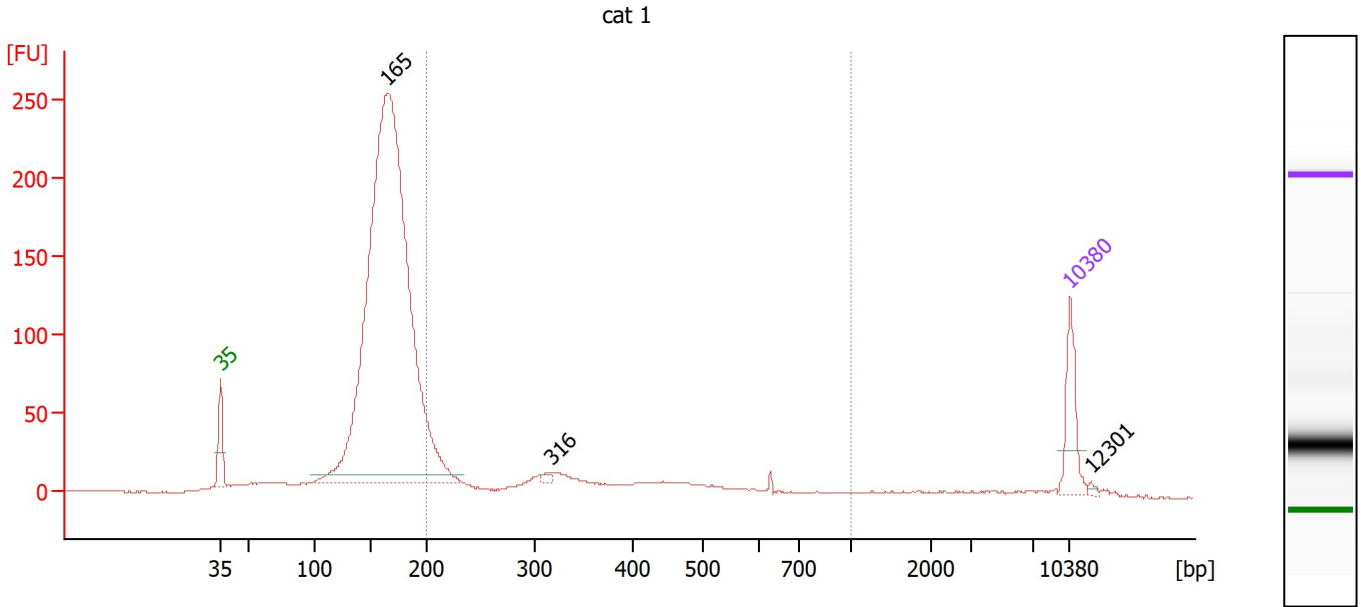
**Peak table for Ladder**

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\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : cat 1**

Number of peaks found: 3                      Corr. Area 1: 356.4  
 Noise: 0.3

**Peak table for sample 1 : cat 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	165	2,476.01	22,719.3	
3	316	9.32	44.7	
4	10,380	75.00	10.9	Upper Marker
5	12,301	0.00	0.0	

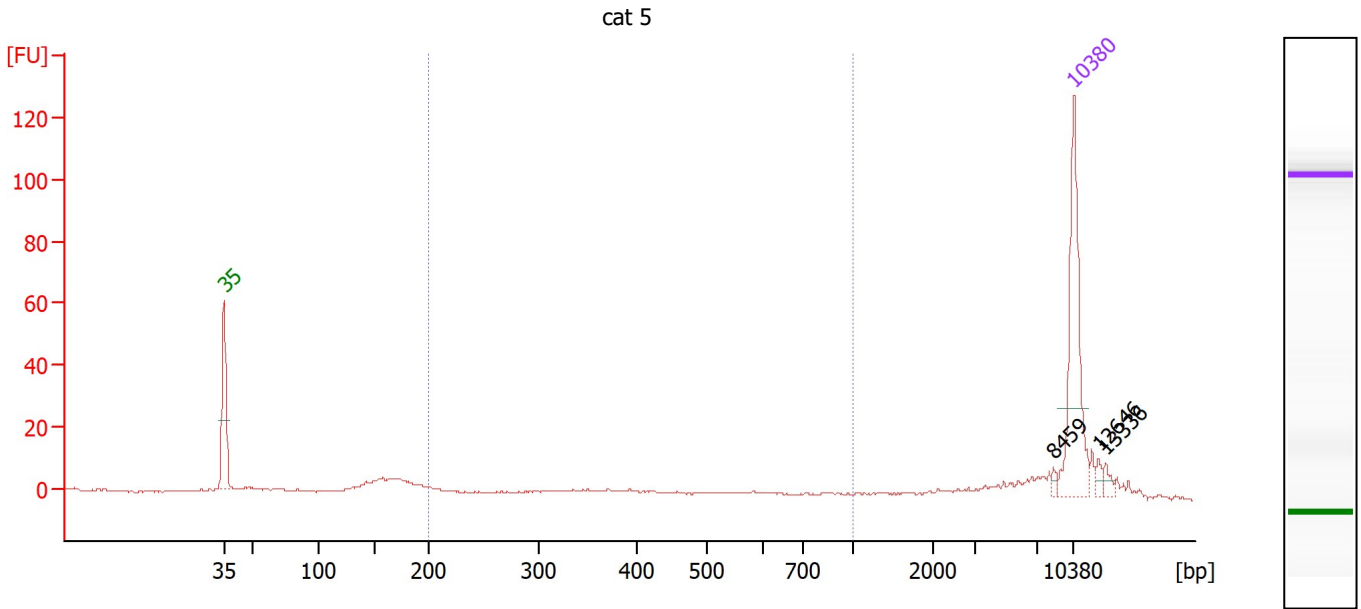
**Region table for sample 1 : cat 1**

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	356.4	15	358	41.2	408.00	2,103.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : cat 5**

Number of peaks found: 3                      Corr. Area 1: 24.1  
 Noise: 0.3

**Peak table for sample 2 : cat 5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	8,459	2.89	0.5	
3	10,380	75.00	10.9	Upper Marker
4	12,646	0.00	0.0	
5	13,336	0.00	0.0	

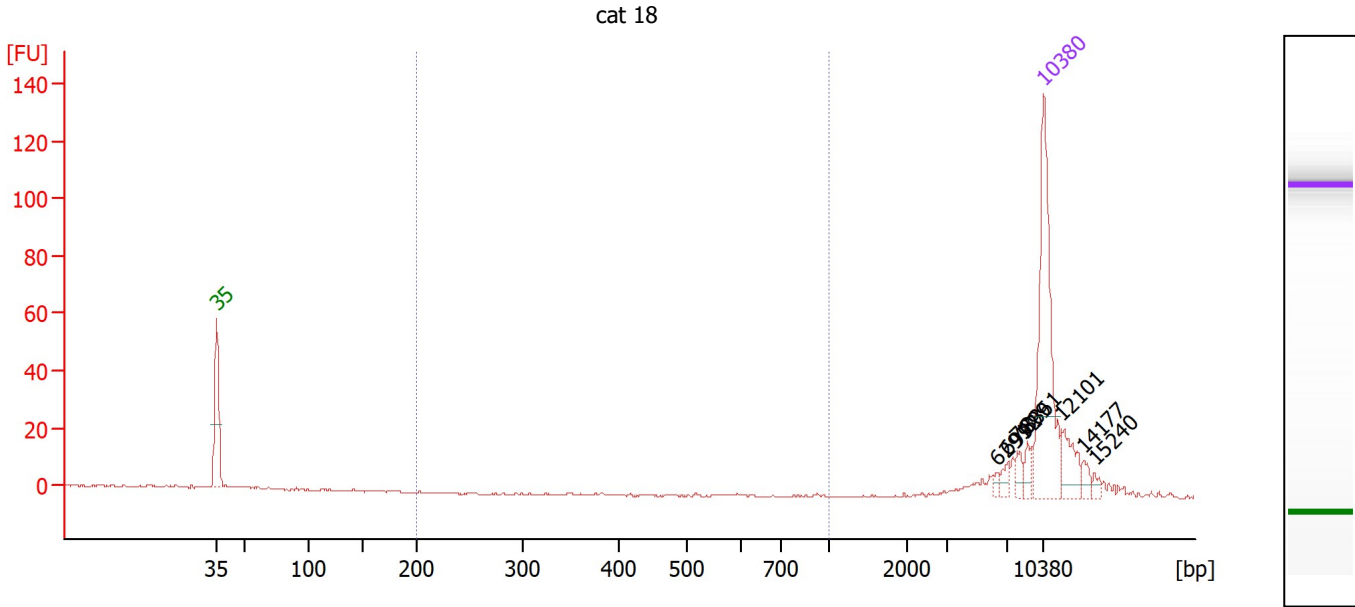
**Region table for sample 2 : cat 5**

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	24.1	18	481	39.9	24.19	94.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : cat 18**

Number of peaks found: 7                      Corr. Area 1: 0.0  
 Noise: 0.3

**Peak table for sample 3 : cat 18**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	6,291	2.83	0.7	
3	6,992	4.78	1.0	
4	7,899	5.84	1.1	
5	8,861	5.73	1.0	
6	10,380	75.00	10.9	Upper Marker
7	12,101	0.00	0.0	
8	14,177	0.00	0.0	
9	15,240	0.00	0.0	

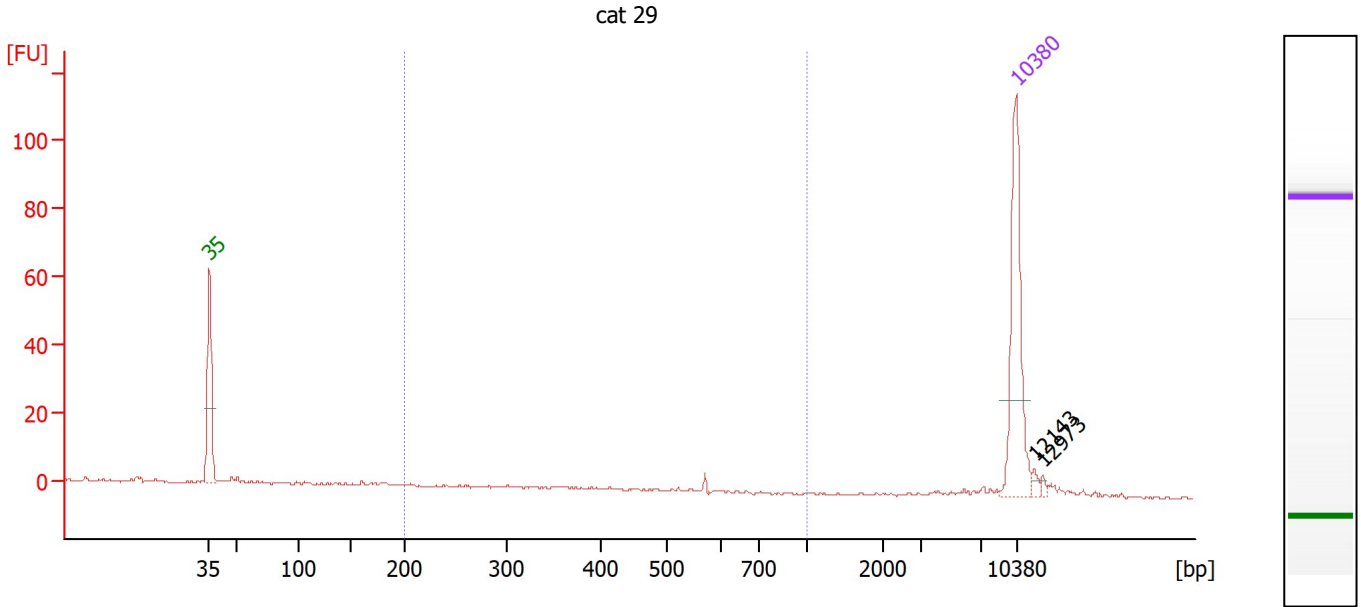
**Region table for sample 3 : cat 18**

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\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : cat 29**

Number of peaks found: 2                      Corr. Area 1: 8.5  
 Noise: 0.2

**Peak table for sample 4 : cat 29**

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	12,143	0.00	0.0	
4	12,973	0.00	0.0	

**Region table for sample 4 : cat 29**

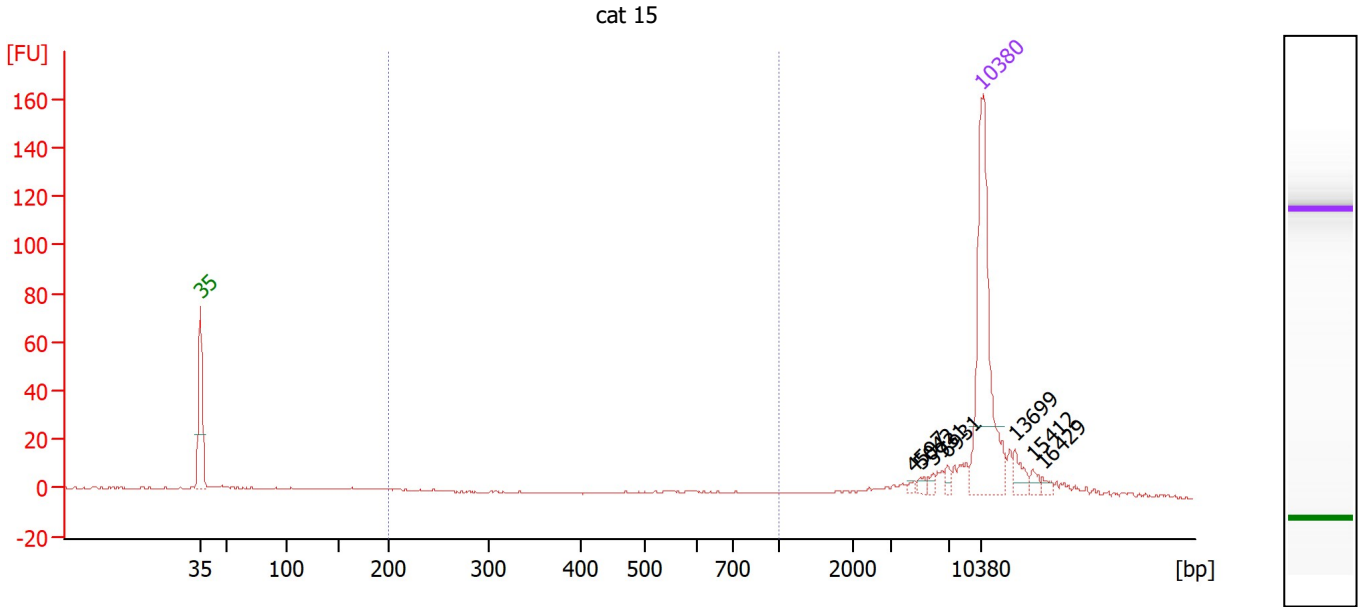
From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	8.5	14	383	31.9	9.37	43.3	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : cat 15**

Number of peaks found: 7                      Corr. Area 1: 11.8  
 Noise: 0.2

**Peak table for sample 5 : cat 15**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	4,597	1.30	0.4	
3	5,042	2.25	0.7	
4	5,931	1.96	0.5	
5	6,931	2.74	0.6	
6	10,380	75.00	10.9	Upper Marker
7	13,699	0.00	0.0	
8	15,412	0.00	0.0	
9	16,429	0.00	0.0	

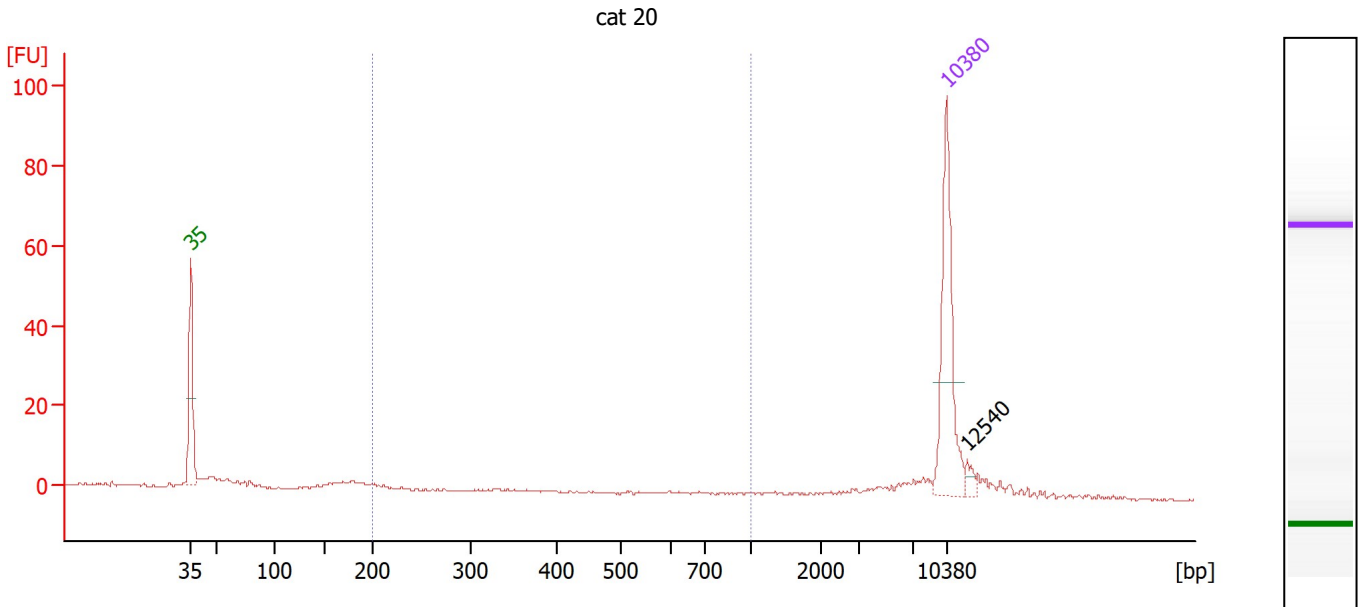
**Region table for sample 5 : cat 15**

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	11.8	7	577	34.0	6.67	23.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : cat 20**

Number of peaks found: 1                      Corr. Area 1: 8.3  
 Noise: 0.3

**Peak table for sample 6 : cat 20**

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	12,540	0.00	0.0	

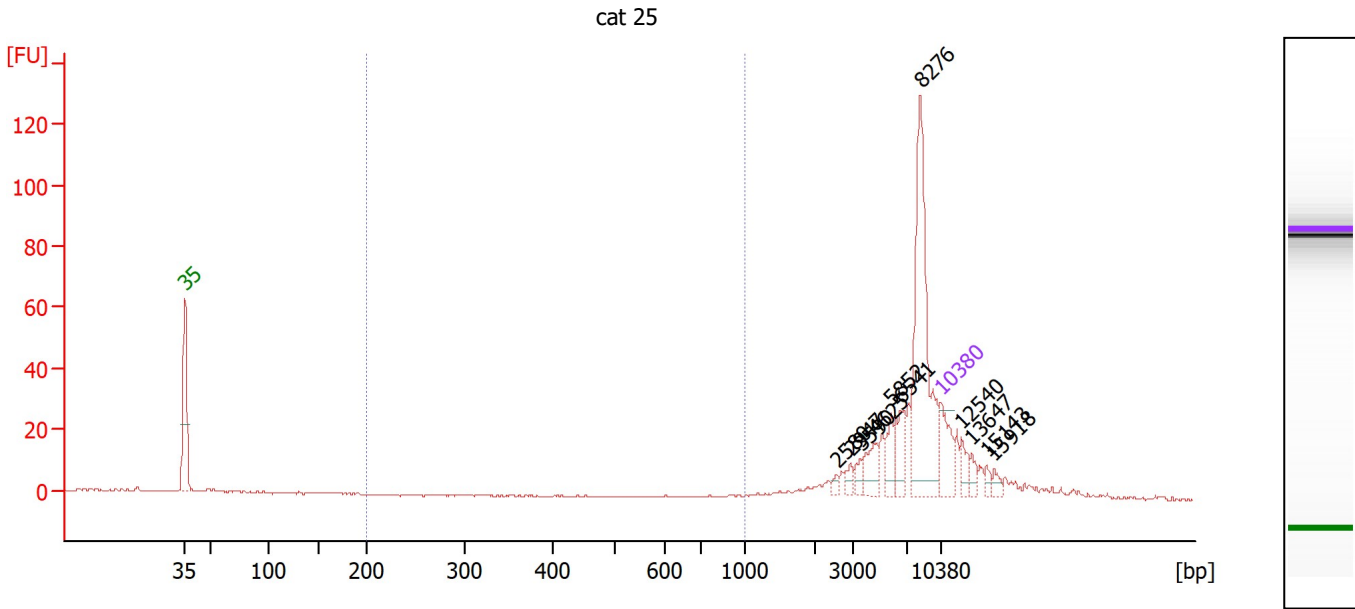
**Region table for sample 6 : cat 20**

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	8.3	9	452	50.6	9.98	48.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : cat 25**

Number of peaks found: 11                      Corr. Area 1: 0.1  
 Noise: 0.2

**Peak table for sample 7 : cat 25**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	2,580	9.06	5.3	
3	2,947	18.31	9.4	
4	3,590	20.51	8.7	
5	4,625	50.71	16.6	
6	5,852	43.66	11.3	
7	6,541	69.17	16.0	
8	8,276	392.84	71.9	
9	10,380	75.00	10.9	Upper Marker
10	12,540	0.00	0.0	
11	13,647	0.00	0.0	
12	15,143	0.00	0.0	
13	15,918	0.00	0.0	

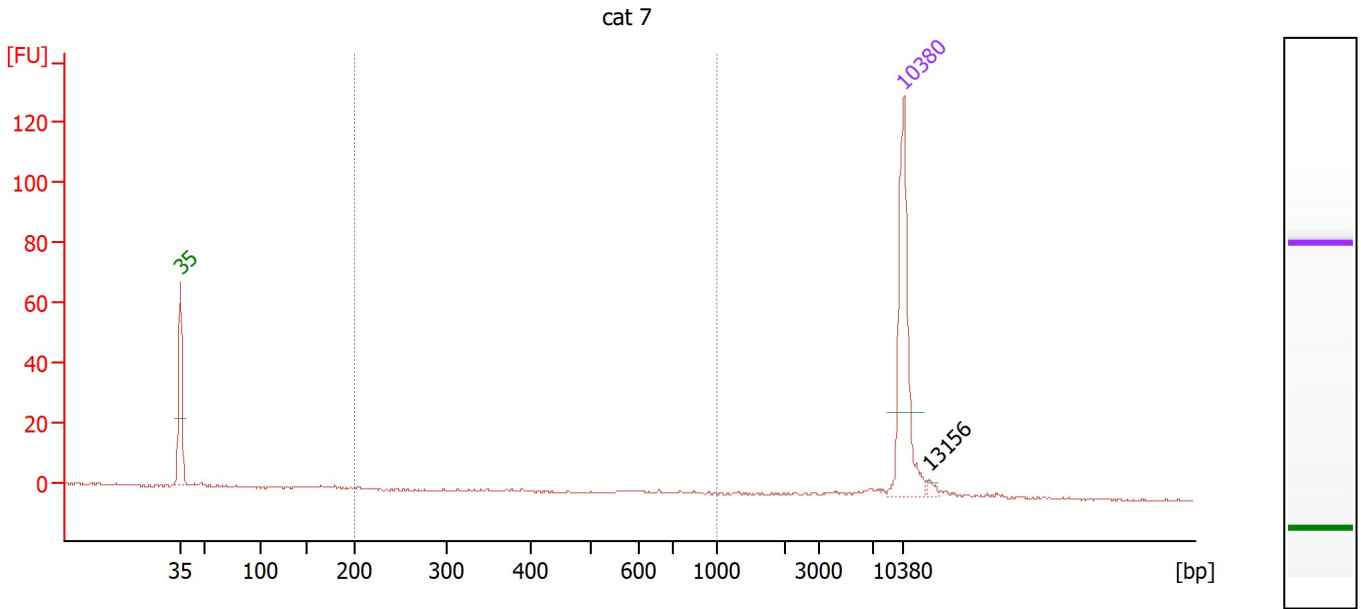
**Region table for sample 7 : cat 25**

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	0.1	0	899	1.4	0.17	0.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : cat 7**

Number of peaks found: 1                      Corr. Area 1: 4.1  
 Noise: 0.3

**Peak table for sample 8 : cat 7**

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	13,156	0.00	0.0	

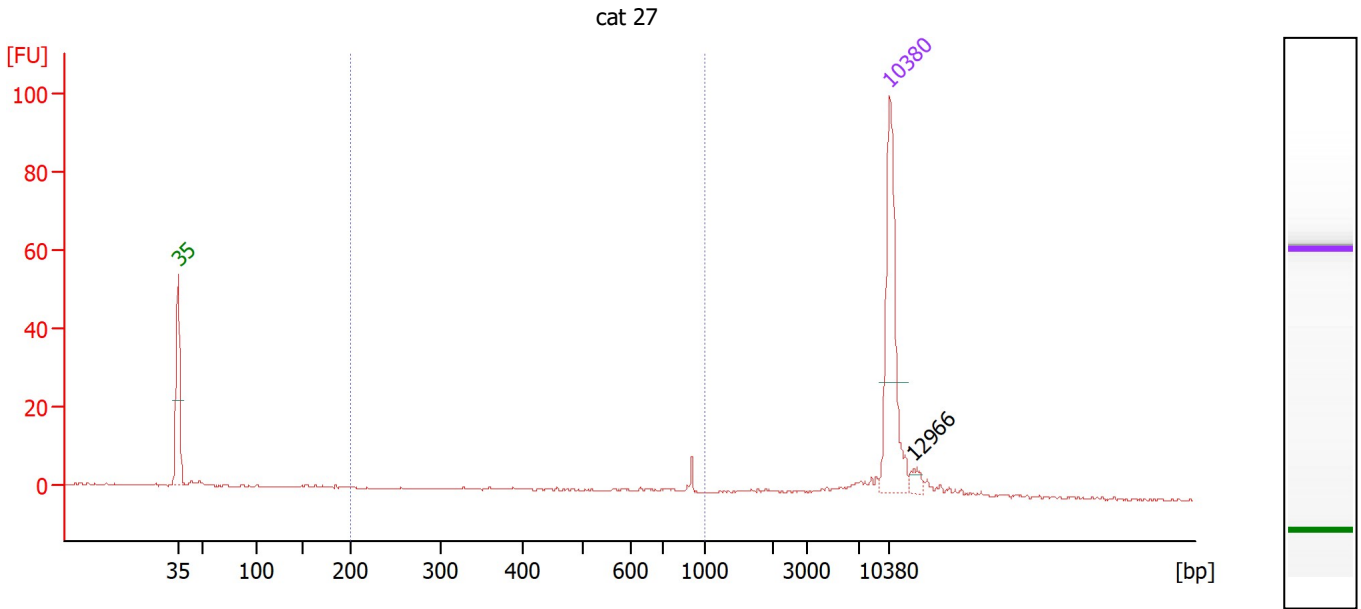
**Region table for sample 8 : cat 7**

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	4.1	12	588	33.5	3.50	11.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : cat 27**

Number of peaks found: 1                      Corr. Area 1: 18.0  
 Noise: 0.2

**Peak table for sample 9 : cat 27**

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	12,966	0.00	0.0	

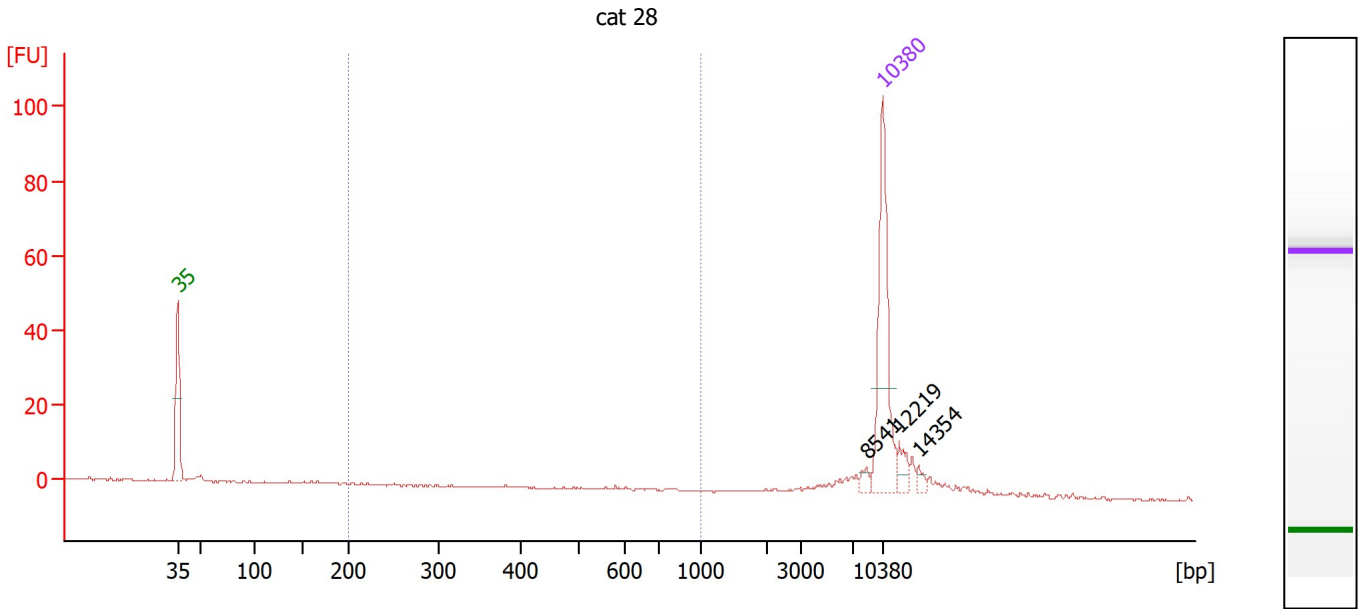
**Region table for sample 9 : cat 27**

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	18.0	25	612	33.2	19.08	56.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : cat 28**

Number of peaks found: 3                      Corr. Area 1: 0.2  
 Noise: 0.2

**Peak table for sample 10 : cat 28**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	8,541	4.29	0.8	
3	10,380	75.00	10.9	Upper Marker
4	12,219	0.00	0.0	
5	14,354	0.00	0.0	

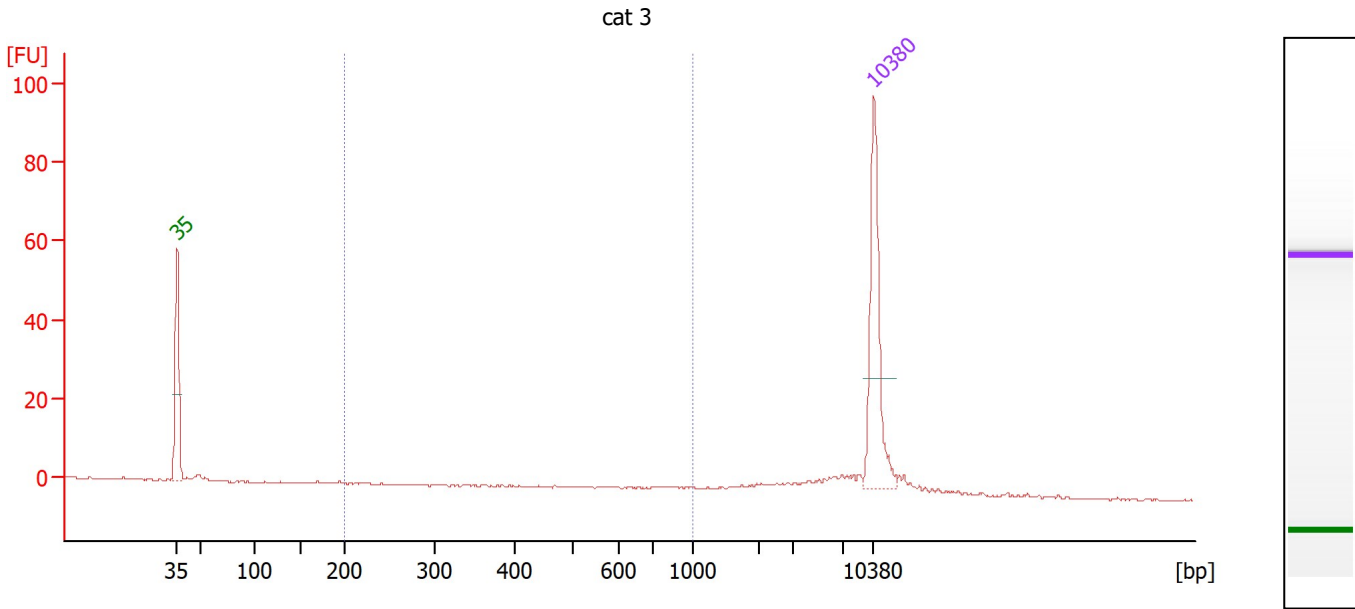
**Region table for sample 10 : cat 28**

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	0.2	0	476	31.3	0.26	1.0	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : cat 3**

Number of peaks found: 0                      Corr. Area 1: 8.7  
 Noise: 0.2

**Peak table for sample 11 : cat 3**

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

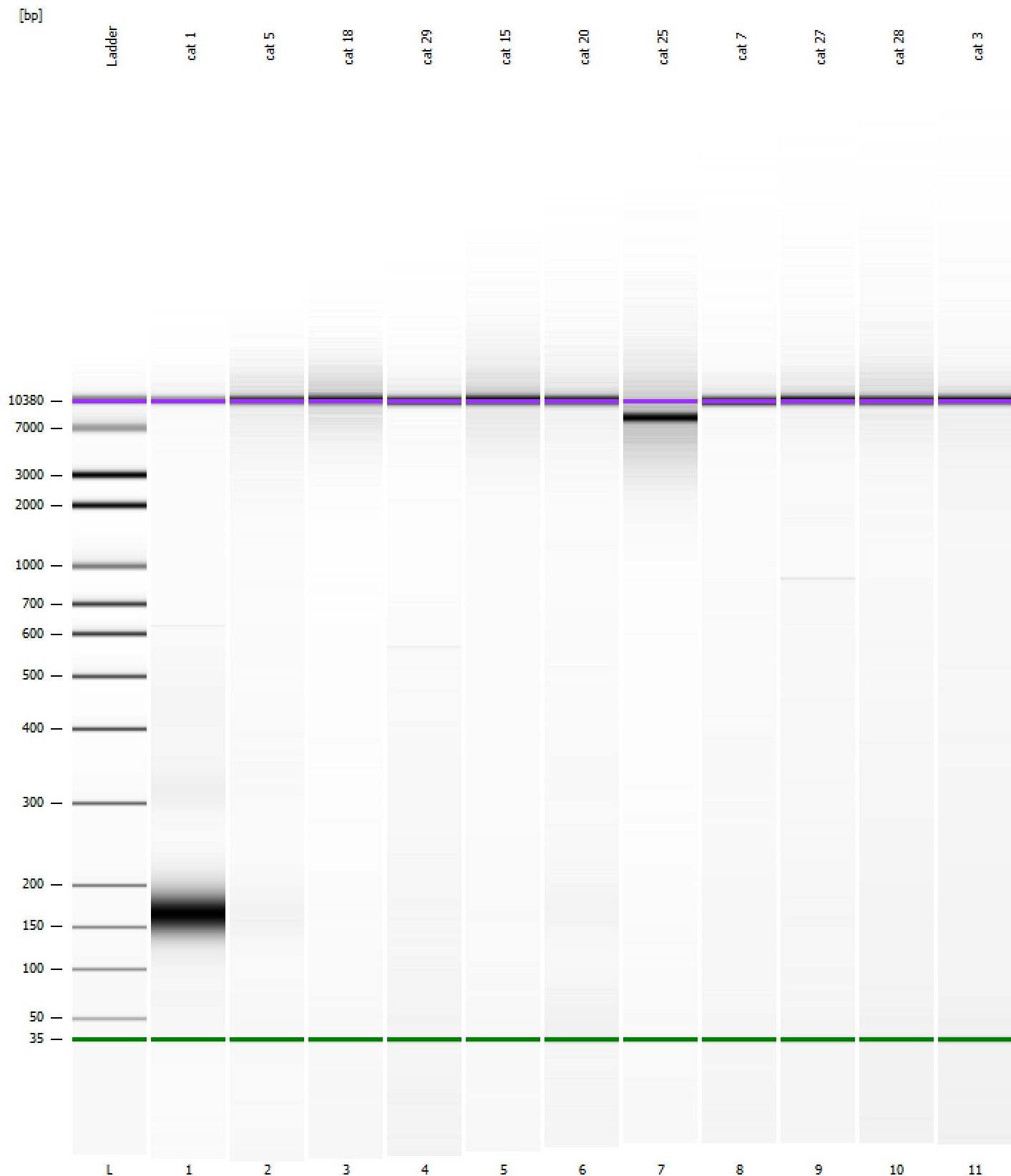
**Region table for sample 11 : cat 3**

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	8.7	14	646	29.1	9.59	25.9	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
Modified: 2/13/2020 3:13:57 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2020-02-13\_001.xad

Created: 2/13/2020 2:32:36 PM  
 Modified: 2/13/2020 3:13:57 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		2/13/2020 3:13:55 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-02-13\Bioanalyze r1_High Sensitivity DNA Assay_2020-02-13_001.xad)		Instrument	Run		2/13/2020 2:32:42 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		2/13/2020 2:32:42 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		2/13/2020 2:32:42 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		2/13/2020 2:32:42 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		2/13/2020 2:32:42 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		2/13/2020 2:32:42 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		2/13/2020 2:32:42 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB