

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-08\2017-12-08_004.xad

Created: 12/8/2017 3:31:06 PM
Modified: 12/8/2017 4:12:20 PM

Electrophoresis File Run Summary

Instrument Information:

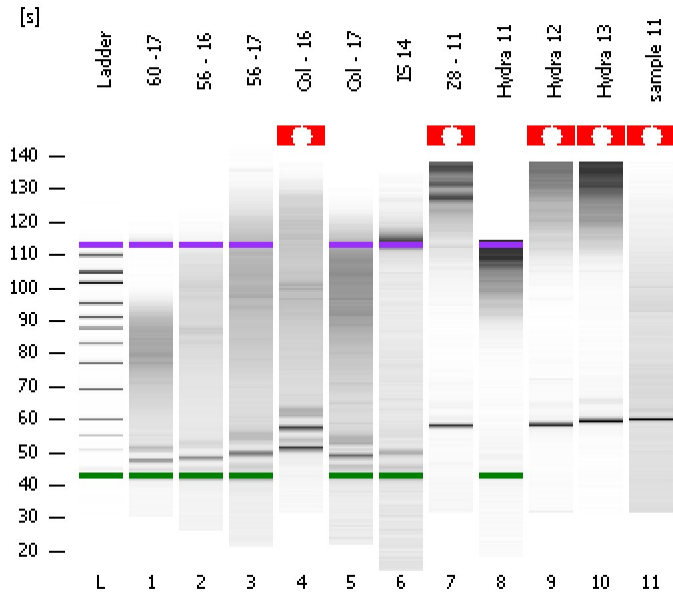
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:

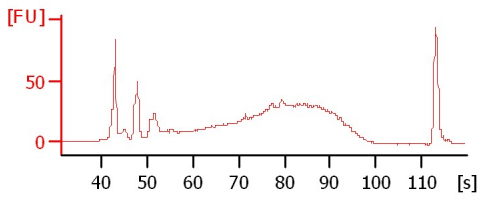
Chip Lot #:
Reagent Kit Lot #:
Chip Comments:



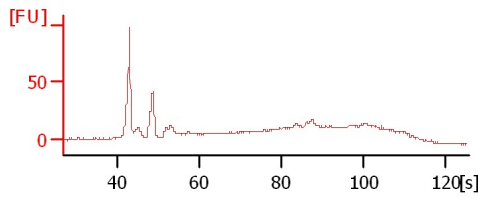
60 -17

56 -16

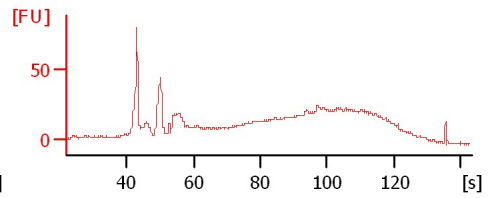
56 -17



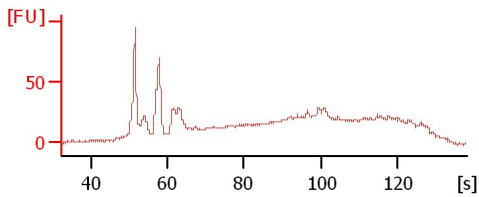
Col -16



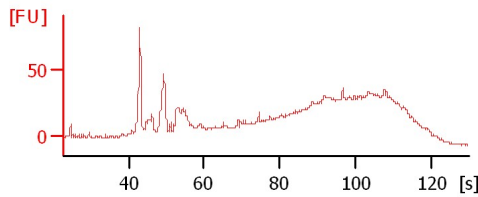
Col -17



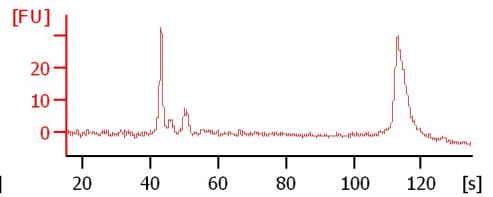
IS 14



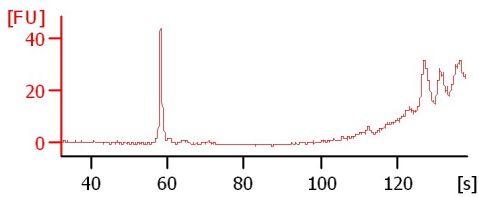
Z8 -11



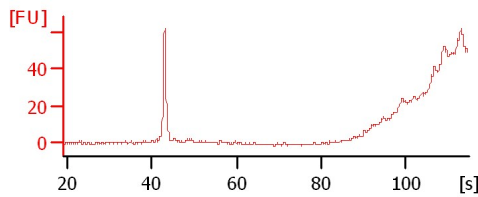
Hydra 11



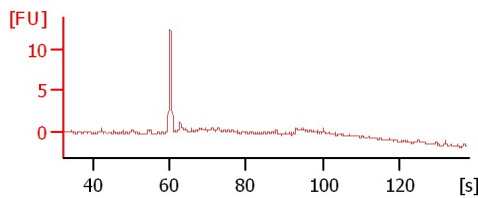
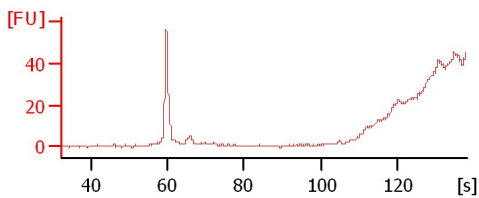
Hydra 12



Hydra 13



sample 11



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Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
60 -17		<input type="checkbox"/>	✓			
56 - 16		<input type="checkbox"/>	✓			
56 -17		<input type="checkbox"/>	✓			
Col - 16		<input type="checkbox"/>	✓			
Col - 17		<input type="checkbox"/>	✓			
IS 14		<input type="checkbox"/>	✓			
Z8 - 11		<input type="checkbox"/>	✓			
Hydra 11		<input type="checkbox"/>	✓			
Hydra 12		<input type="checkbox"/>	✓			
Hydra 13		<input type="checkbox"/>	✓			
sample 11		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

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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

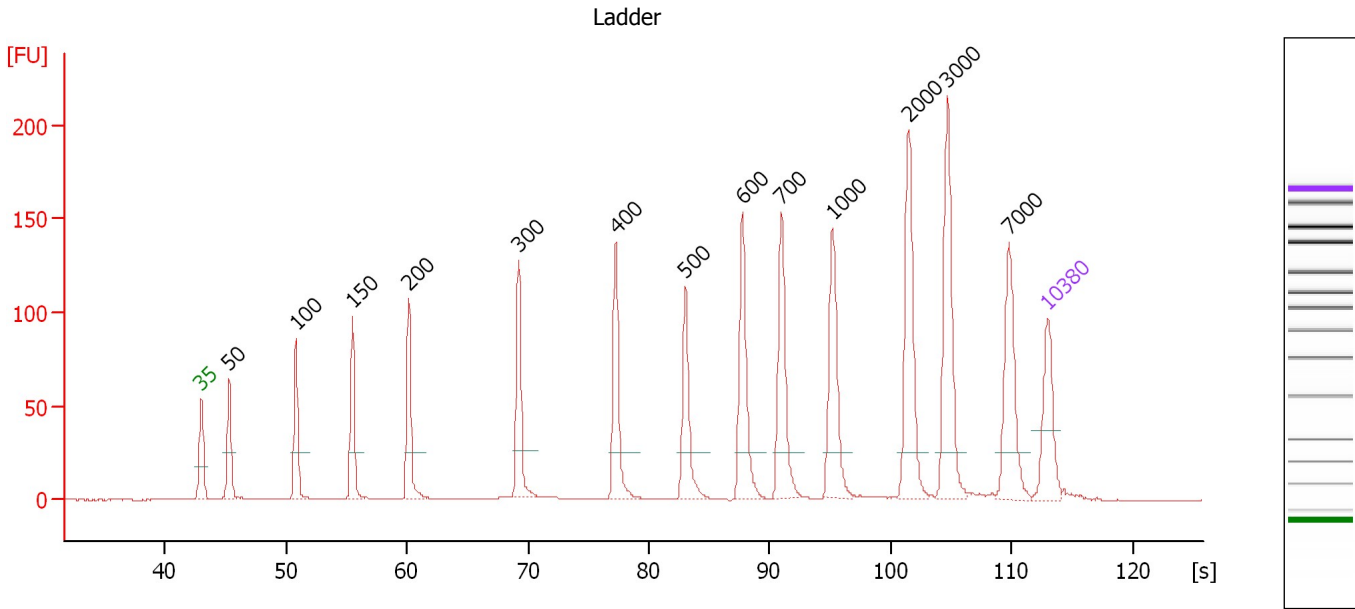
Ladder

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

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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

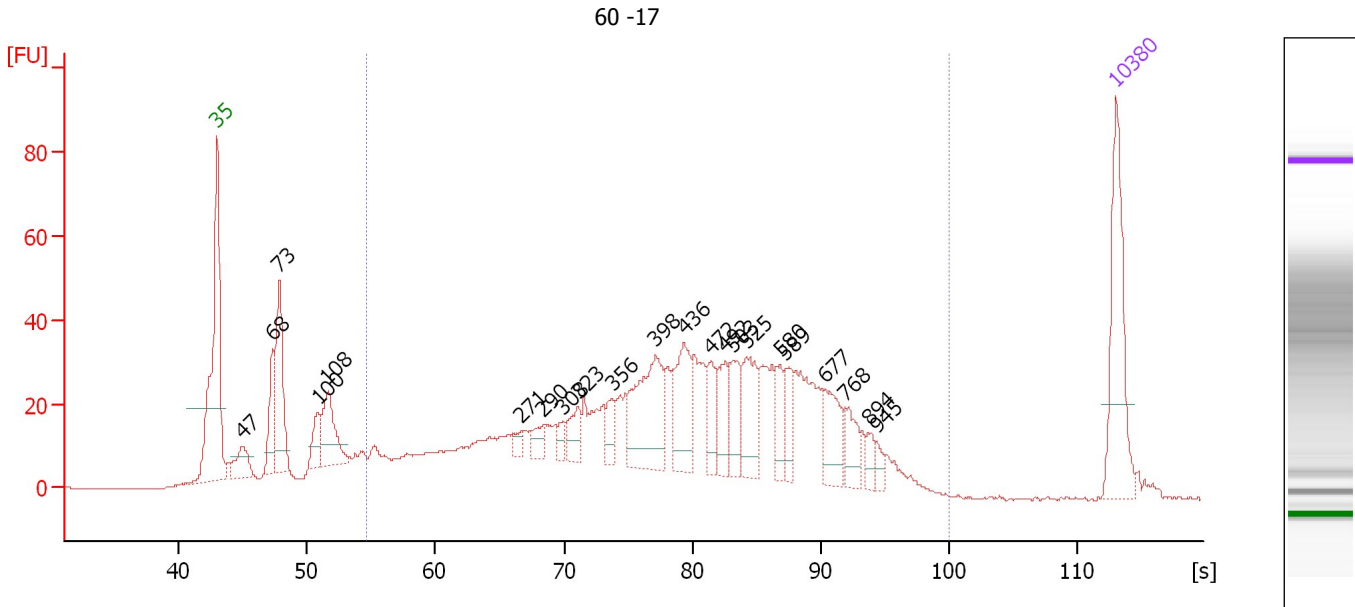
Peak table for Ladder

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	45.31
3	100	150.00	2,272.7	Ladder Peak	50.82
4	150	150.00	1,515.2	Ladder Peak	55.53
5	200	150.00	1,136.4	Ladder Peak	60.14
6	300	150.00	757.6	Ladder Peak	69.25
7	400	150.00	568.2	Ladder Peak	77.29
8	500	150.00	454.5	Ladder Peak	83.06
9	600	150.00	378.8	Ladder Peak	87.77
10	700	150.00	324.7	Ladder Peak	91.01
11	1,000	150.00	227.3	Ladder Peak	95.19
12	2,000	150.00	113.6	Ladder Peak	101.54
13	3,000	150.00	75.8	Ladder Peak	104.74
14	7,000	150.00	32.5	Ladder Peak	109.85
15	10,380	75.00	10.9	Upper Marker	113.00

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Electropherogram Summary Continued ...



Overall Results for sample 1 : 60 -17

Number of peaks found: 22 Corr. Area 1: 1,166.8
 Noise: 0.2

Peak table for sample 1 : 60 -17


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	47	34.03	1,085.4		44.92
3	68	50.39	1,120.3		47.31
4	73	106.00	2,208.8		47.81
5	100	30.68	464.6		50.82
6	108	68.41	959.1		51.58
7	271	10.42	58.2		66.64
8	290	16.36	85.4		68.36
9	308	10.04	49.5		69.86
10	323	25.10	117.8		71.08
11	356	19.46	82.8		73.75
12	398	98.86	376.2		77.14
13	436	63.60	221.1		79.36
14	472	26.96	86.5		81.45
15	492	35.84	110.4		82.58
16	503	33.76	101.7		83.21
17	525	48.83	140.8		84.26
18	580	24.11	62.9		86.85
19	589	24.97	64.2		87.27
20	677	37.97	84.9		90.28
21	768	22.82	45.0		91.95
22	894	10.45	17.7		93.71
23	945	7.61	12.2		94.42
24	10,380	75.00	10.9	Upper Marker	113.00

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Electropherogram Summary Continued ...

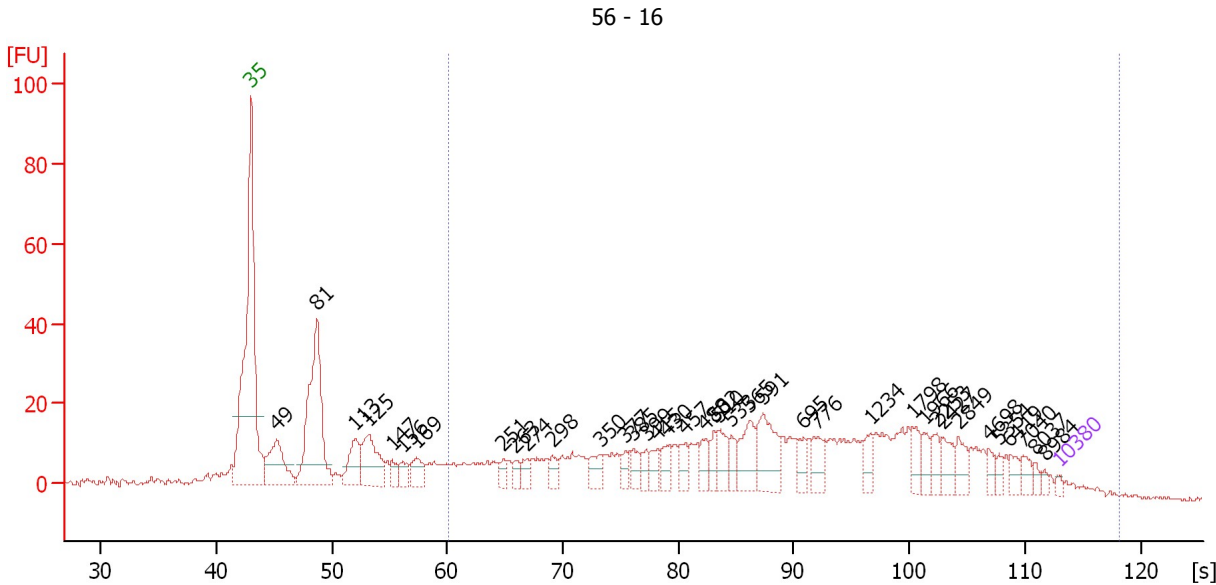
... Region table for sample 1 : 60 -17

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ μ l]	% of Total	Size distribution in CV [%]
54.64	99.98	471	1,166.8	5,924.4	 1,363.80	78	44.2

Assay Class: High Sensitivity DNA Assay
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Electropherogram Summary Continued ...



Overall Results for sample 2 : 56 - 16

Number of peaks found: 38 Corr. Area 1: 686.3
 Noise: 0.7

Peak table for sample 2 : 56 - 16

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	49	1,788.11	55,069.1		45.19
3	81	4,978.99	93,659.0		48.67
4	113	1,108.17	14,884.1		52.02
5	125	1,681.79	20,440.5		53.14
6	147	371.47	3,831.7		55.23
7	156	378.95	3,671.2		56.12
8	169	555.36	4,964.7		57.33
9	251	292.54	1,764.0		64.81
10	263	269.76	1,557.0		65.84
11	274	309.84	1,714.9		66.86
12	298	319.86	1,624.8		69.09
13	350	485.59	2,104.9		73.23
14	377	303.99	1,222.6		75.42
15	385	350.76	1,381.0		76.07
16	399	282.22	1,070.9		77.23
17	415	308.50	1,126.0		78.16
18	430	438.24	1,545.5		79.00
19	457	389.30	1,290.7		80.58
20	488	411.77	1,279.4		82.35
21	502	330.06	997.0		83.14
22	510	542.31	1,612.7		83.51
23	533	366.14	1,040.4		84.63
24	565	864.71	2,319.5		86.12
25	591	1,188.66	3,049.8		87.33

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Electropherogram Summary Continued ...

... Peak table for sample 2 : 56 - 16

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	695	339.07	738.9		90.86
27	776	513.76	1,003.3		92.07
28	1,234	329.12	404.2		96.67
29	1,798	349.06	294.2		100.26
30	1,966	266.16	205.1		101.33
31	2,253	287.68	193.5		102.35
32	2,427	377.84	235.9		102.91
33	2,849	329.20	175.1		104.26
34	4,698	202.98	65.5		106.91
35	5,354	135.60	38.4		107.74
36	6,119	213.67	52.9		108.72
37	7,040	221.95	47.8		109.88
38	8,037	104.60	19.7		110.81
39	8,984	84.29	14.2		111.70
40	10,380	75.00	10.9	Upper Marker	113.00

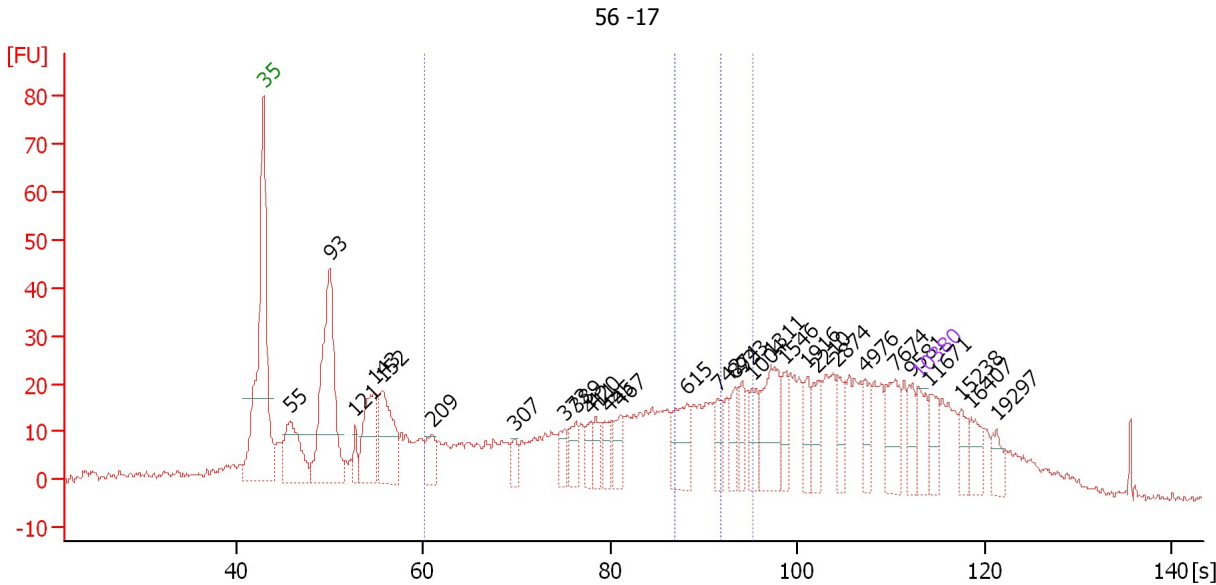
Region table for sample 2 : 56 - 16

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.14	118.17	1,747	686.3	65,237.6	21,722.84	68	100.0

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Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : 56 -17

Height Threshold [FU] : 10

Overall Results for sample 3 : 56 -17

Number of peaks found: 30 Corr. Area 1: 507.9
 Noise: 0.7 Corr. Area 2: 85.8

Peak table for sample 3 : 56 -17

Pea k	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	55	293.34	8,069.8		45.87
3	93	771.68	12,558.5		50.06
4	121	57.24	715.6		52.81
5	143	292.06	3,105.3		54.82
6	152	327.96	3,276.1		55.68
7	209	102.29	741.7		60.96
8	307	51.72	255.4		69.80
9	373	59.48	241.5		75.13
10	389	78.51	305.9		76.39
11	411	52.03	191.7		77.94
12	420	53.96	194.6		78.46
13	445	64.55	219.7		79.89
14	467	87.77	284.8		81.16
15	615	146.13	359.8		88.27
16	742	77.35	158.0		91.60
17	874	69.68	120.8		93.43
18	923	67.00	109.9		94.12
19	1,004	78.70	118.8		95.21
20	1,311	188.58	218.0		97.16
21	1,546	60.66	59.5		98.66
22	1,916	61.67	48.8		101.01

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Electropherogram Summary Continued ...

... Peak table for sample 3 : 56-17

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
23	2,210	71.55	49.0		102.21
24	2,874	61.13	32.2		104.34
25	4,976	62.98	19.2		107.26
26	7,674	117.65	23.2		110.48
27	9,581	55.98	8.9		112.25
28	10,380	75.00	10.9	Upper Marker	113.00
29	11,671	0.00	0.0		114.20
30	15,238	0.00	0.0		117.53
31	16,407	0.00	0.0		118.62
32	19,297	0.00	0.0		121.32

Region table for sample 3 : 56-17

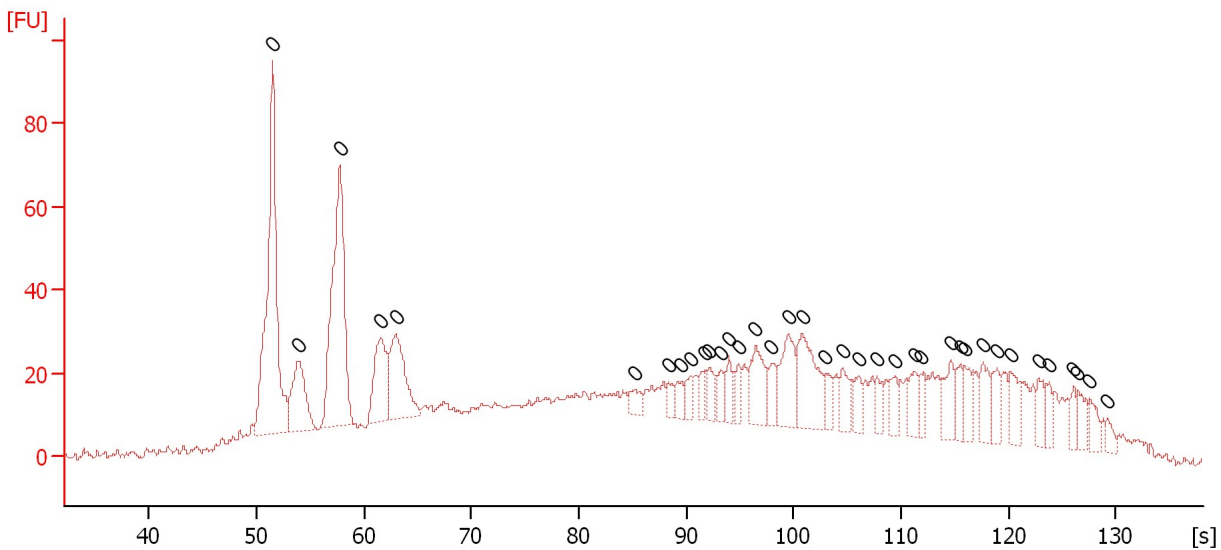
From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.14	95.19	509	507.9	9,539.6	2,499.85	37	40.7
86.84	91.84	651	85.8	898.5	384.62	6	7.4

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Electropherogram Summary Continued ...

Col - 16



Overall Results for sample 4 : Col - 16

Number of peaks found: 0 Noise: 0.7

Peak table for sample 4 : Col - 16

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		51.50
2	0	0.00	0.0		53.90
3	0	0.00	0.0		57.75
4	0	0.00	0.0		61.50
5	0	0.00	0.0		62.95
6	0	0.00	0.0		85.25
7	0	0.00	0.0		88.35
8	0	0.00	0.0		89.55
9	0	0.00	0.0		90.45
10	0	0.00	0.0		91.75
11	0	0.00	0.0		92.15
12	0	0.00	0.0		93.25
13	0	0.00	0.0		94.00
14	0	0.00	0.0		94.85
15	0	0.00	0.0		96.45
16	0	0.00	0.0		97.95
17	0	0.00	0.0		99.50
18	0	0.00	0.0		100.80
19	0	0.00	0.0		103.00
20	0	0.00	0.0		104.60
21	0	0.00	0.0		106.00
22	0	0.00	0.0		107.80
23	0	0.00	0.0		109.45
24	0	0.00	0.0		111.30
25	0	0.00	0.0		111.85
26	0	0.00	0.0		114.65
27	0	0.00	0.0		115.50

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Electropherogram Summary Continued ...

... Peak table for sample 4 :

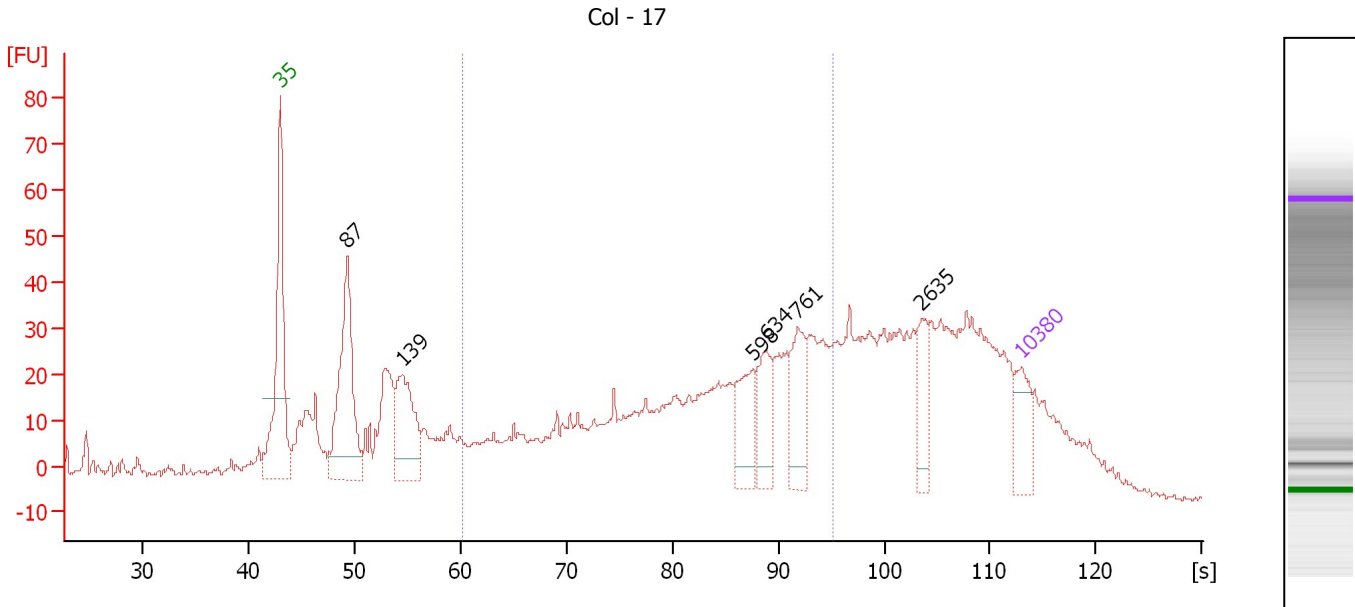
Col - 16

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
28	0	0.00	0.0		115.90
29	0	0.00	0.0		117.60
30	0	0.00	0.0		118.95
31	0	0.00	0.0		120.20
32	0	0.00	0.0		122.85
33	0	0.00	0.0		123.75
34	0	0.00	0.0		126.05
35	0	0.00	0.0		126.45
36	0	0.00	0.0		127.55
37	0	0.00	0.0		129.20

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Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : Col - 17

Area Threshold : 40

Overall Results for sample 5 : Col - 17

Number of peaks found: 6
 Noise: 0.9
 Corr. Area 1: 692.0

Peak table for sample 5 : Col - 17

Pea k	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	87	471.79	8,258.9		49.34
3	139	279.06	3,038.0		54.51
4	598	126.33	320.3		87.66
5	634	121.50	290.4		88.87
6	761	133.33	265.5		91.86
7	2,635	79.08	45.5		103.57
8	10,380	75.00	10.9	Upper Marker	113.00

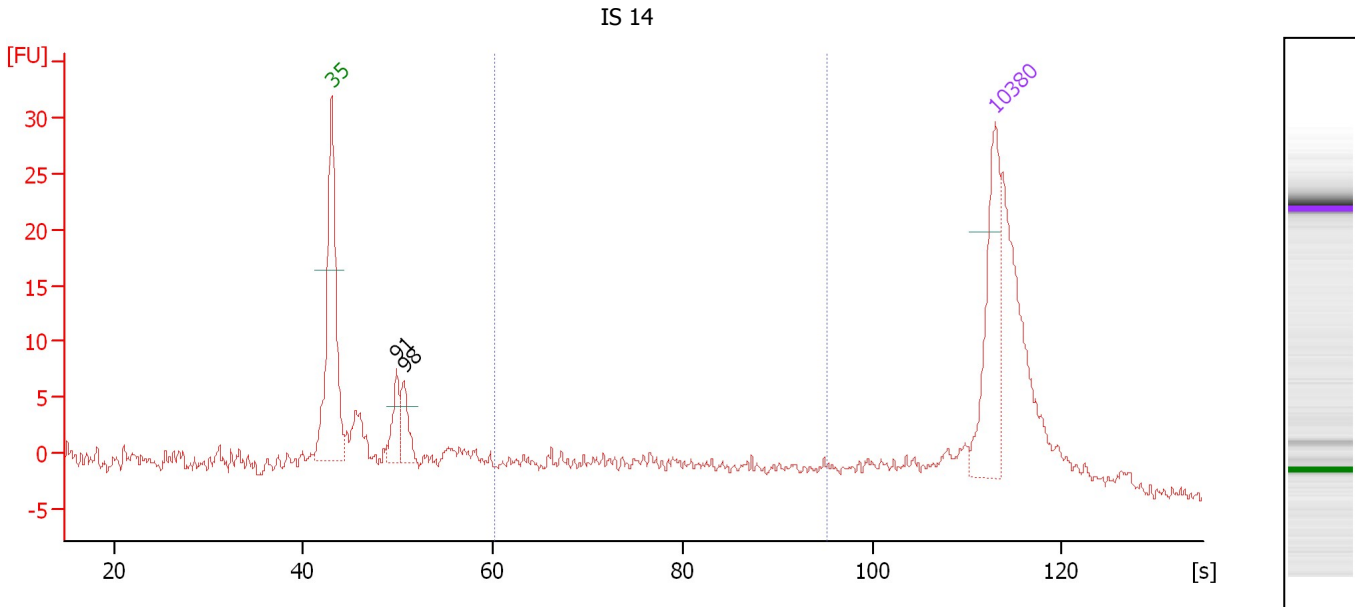
Region table for sample 5 : Col - 17

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.14	95.19	538	692.0	6,985.9	1,953.83	41	38.5

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Electropherogram Summary Continued ...



Overall Results for sample 6 : IS 14

Number of peaks found: 2 Corr. Area 1: 38.4
 Noise: 0.6

Peak table for sample 6 : IS 14

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	91	35.59	590.9		49.85
3	98	36.80	569.3		50.59
4	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 6 : IS 14

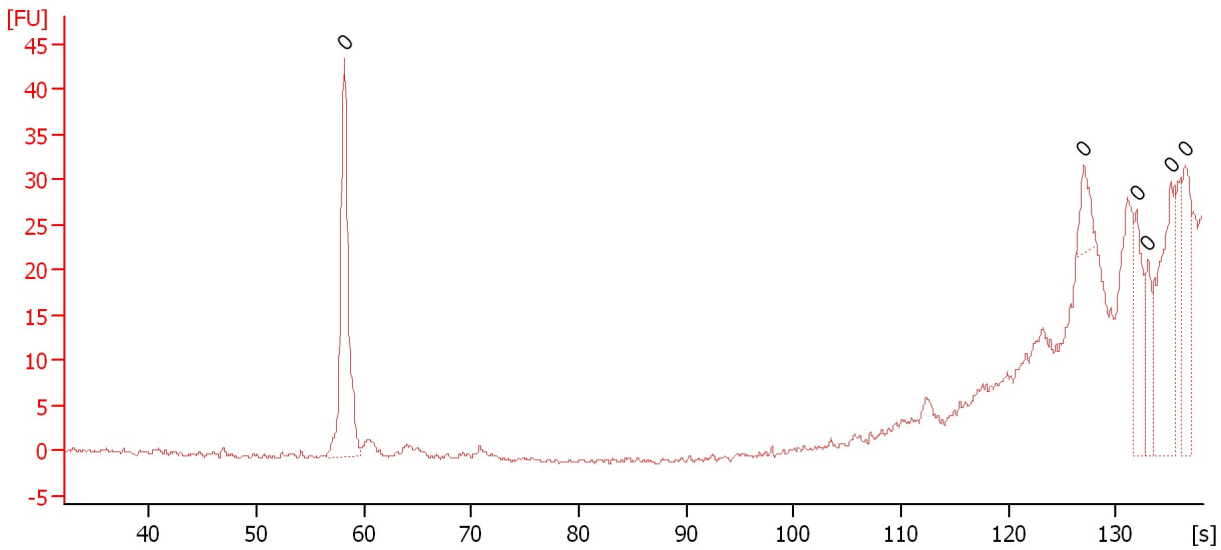
From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.14	95.19	472	38.4	432.7	107.80	21	41.7

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Electropherogram Summary Continued ...

Z8 - 11



Overall Results for sample 7 : Z8 - 11

Number of peaks found: 0 Noise: 0.3

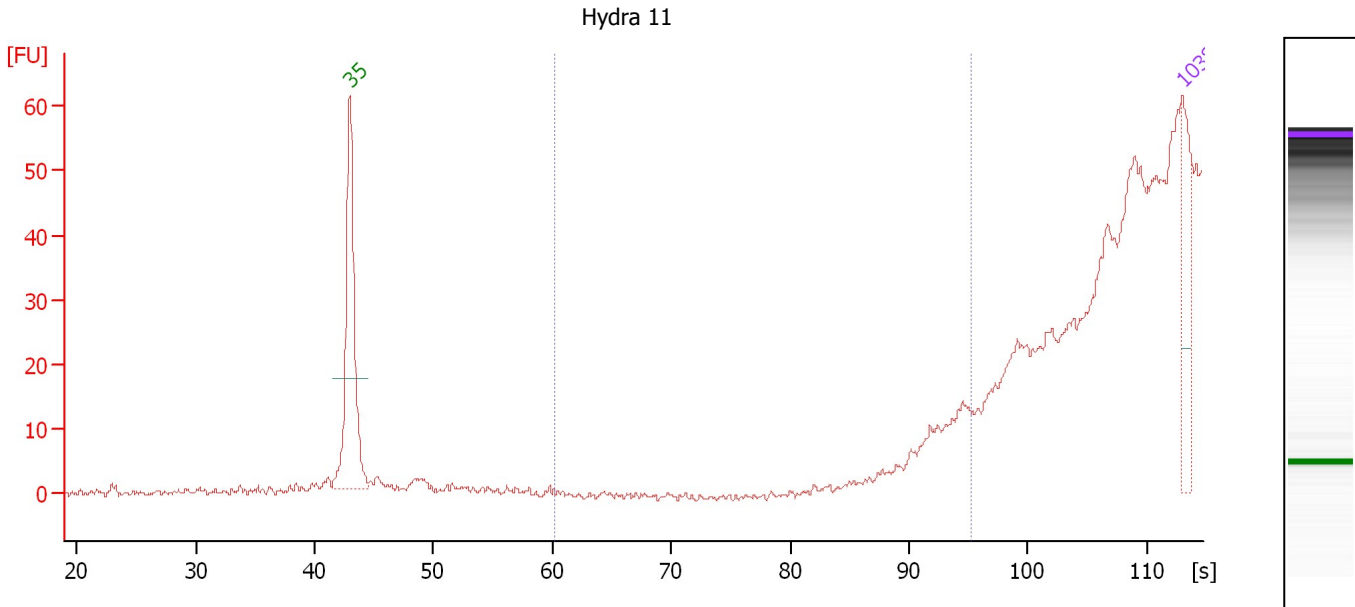
Peak table for sample 7 : Z8 - 11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		58.15
2	0	0.00	0.0		127.05
3	0	0.00	0.0		131.90
4	0	0.00	0.0		133.00
5	0	0.00	0.0		135.15
6	0	0.00	0.0		136.45

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-08\2017-12-08_004.xad

Created: 12/8/2017 3:31:06 PM
 Modified: 12/8/2017 4:12:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Hydra 11

Number of peaks found: 0 Corr. Area 1: 0.0
 Noise: 0.7

Peak table for sample 8 : Hydra 11

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	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 8 : Hydra 11

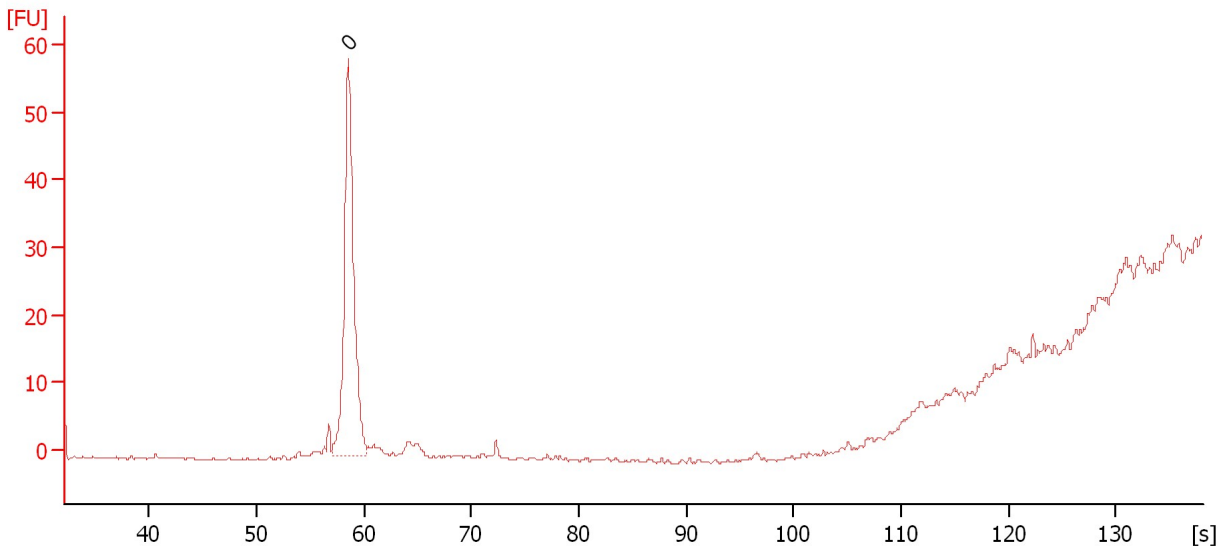
From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
60.14	95.19	0	0.0	0.0	0.00	0	0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-08\2017-12-08_004.xad

Created: 12/8/2017 3:31:06 PM
Modified: 12/8/2017 4:12:20 PM

Electropherogram Summary Continued ...

Hydra 12



Overall Results for sample 9 : Hydra 12

Number of peaks found: 0 Noise: 0.2

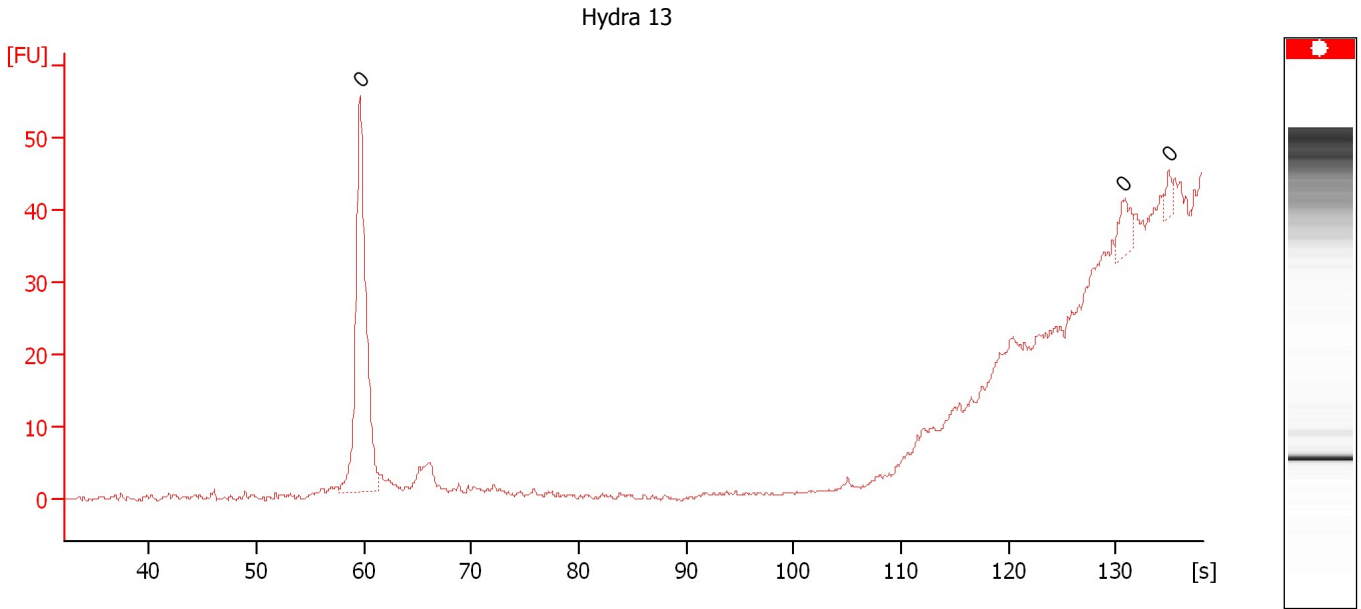
Peak table for sample 9 : Hydra 12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		58.55

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-08\2017-12-08_004.xad

Created: 12/8/2017 3:31:06 PM
Modified: 12/8/2017 4:12:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Hydra 13

Number of peaks found: 0 Noise: 0.3

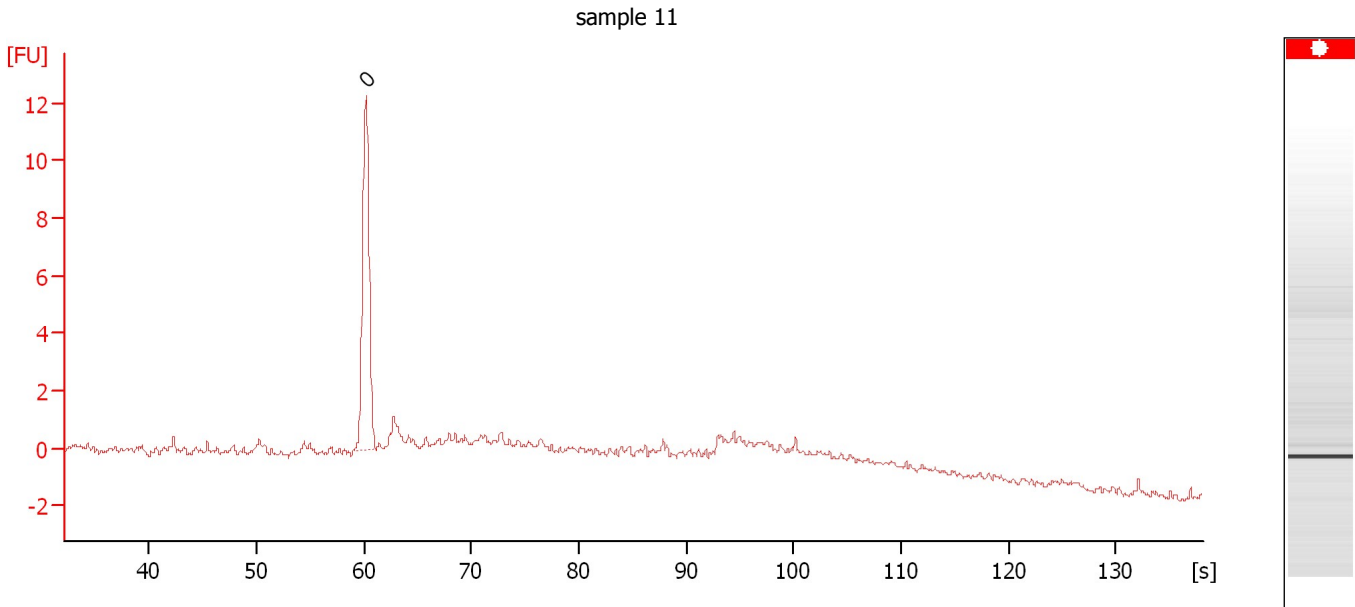
Peak table for sample 10 : Hydra 13

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		59.65
2	0	0.00	0.0		130.65
3	0	0.00	0.0		134.90

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-08\2017-12-08_004.xad

Created: 12/8/2017 3:31:06 PM
Modified: 12/8/2017 4:12:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 0 Noise: 0.1

Peak table for sample 11 : sample 11

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		60.20

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-12-08\2017-12-08_004.xad

Created: 12/8/2017 3:31:06 PM
Modified: 12/8/2017 4:12:20 PM

Gel Image

