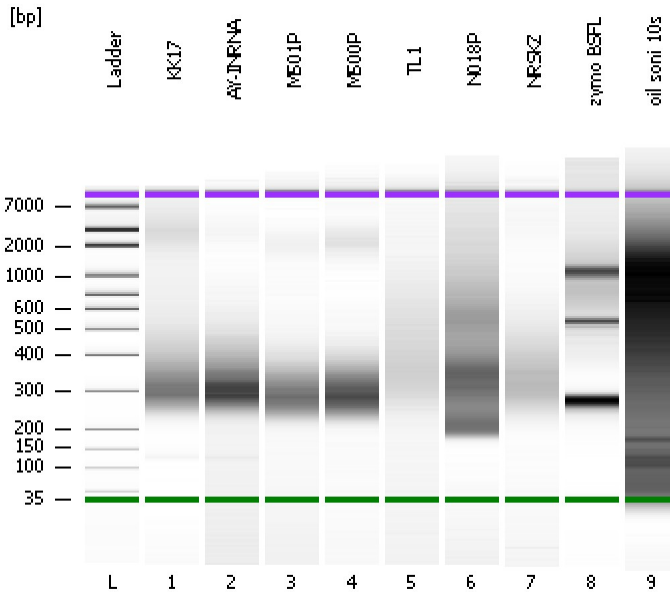


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
Modified: 4/5/2017 2:49:20 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

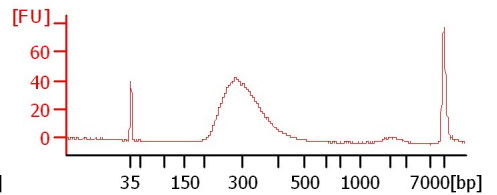
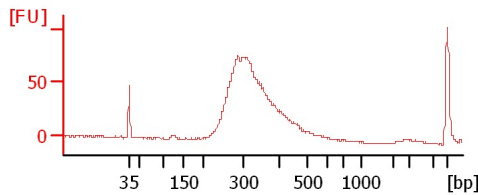
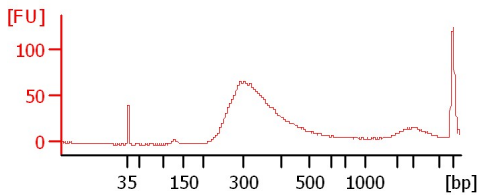
Chip Information:

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

KK17

AY-INRNA

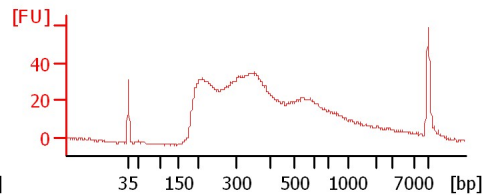
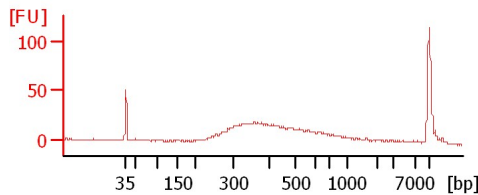
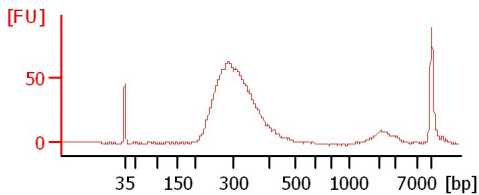
M501P



M500P

TL1

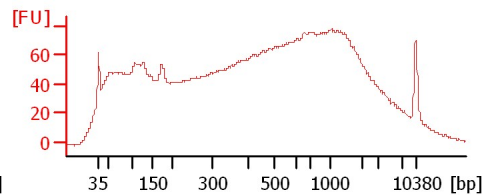
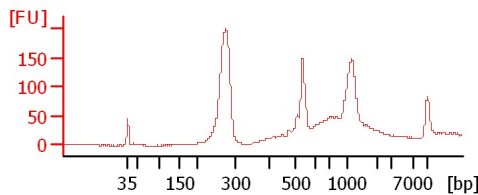
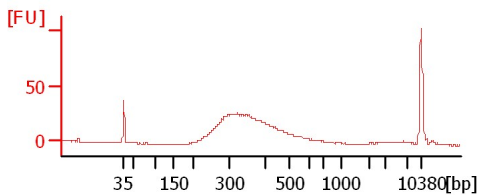
N018P



NRSKZ

zymo BSFL

oil soni 10s



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
KK17		<input type="checkbox"/>	✓			
AY-INRNA		<input type="checkbox"/>	✓			
M501P		<input type="checkbox"/>	✓			
M500P		<input type="checkbox"/>	✓			
TL1		<input type="checkbox"/>	✓			
N018P		<input type="checkbox"/>	✓			
NRSKZ		<input type="checkbox"/>	✓			
zymo BSFL		<input type="checkbox"/>	✓			
oil soni 10s		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
Modified: 4/5/2017 2:49:20 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

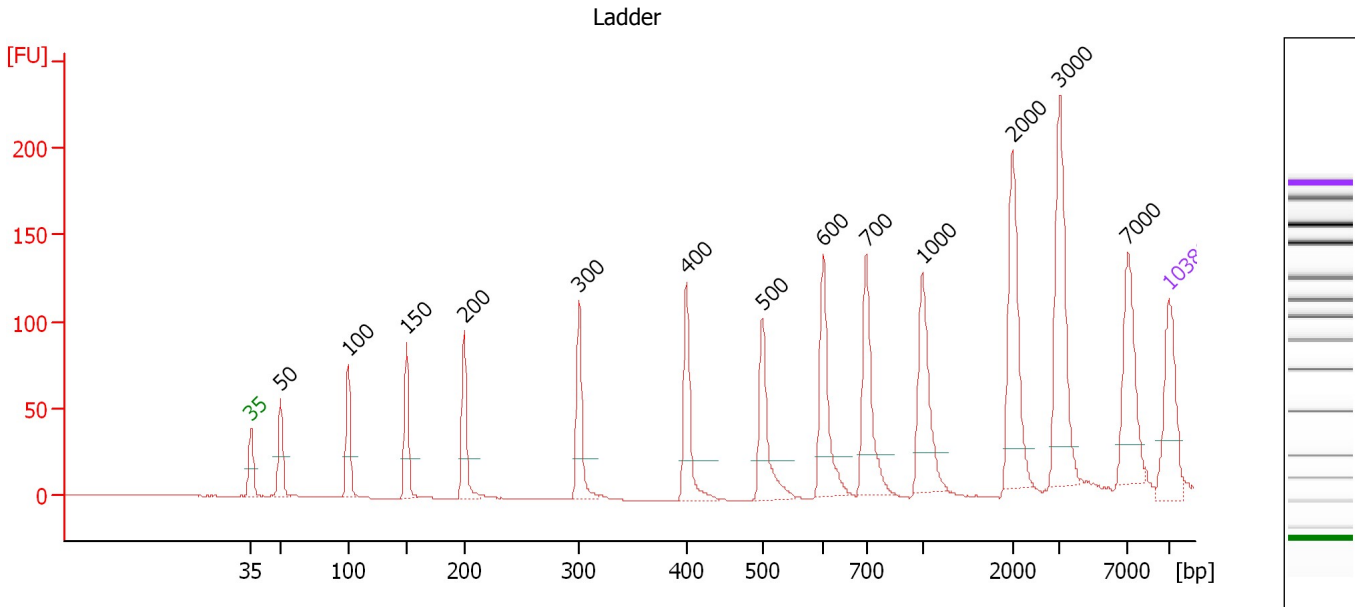
Ladder

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:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

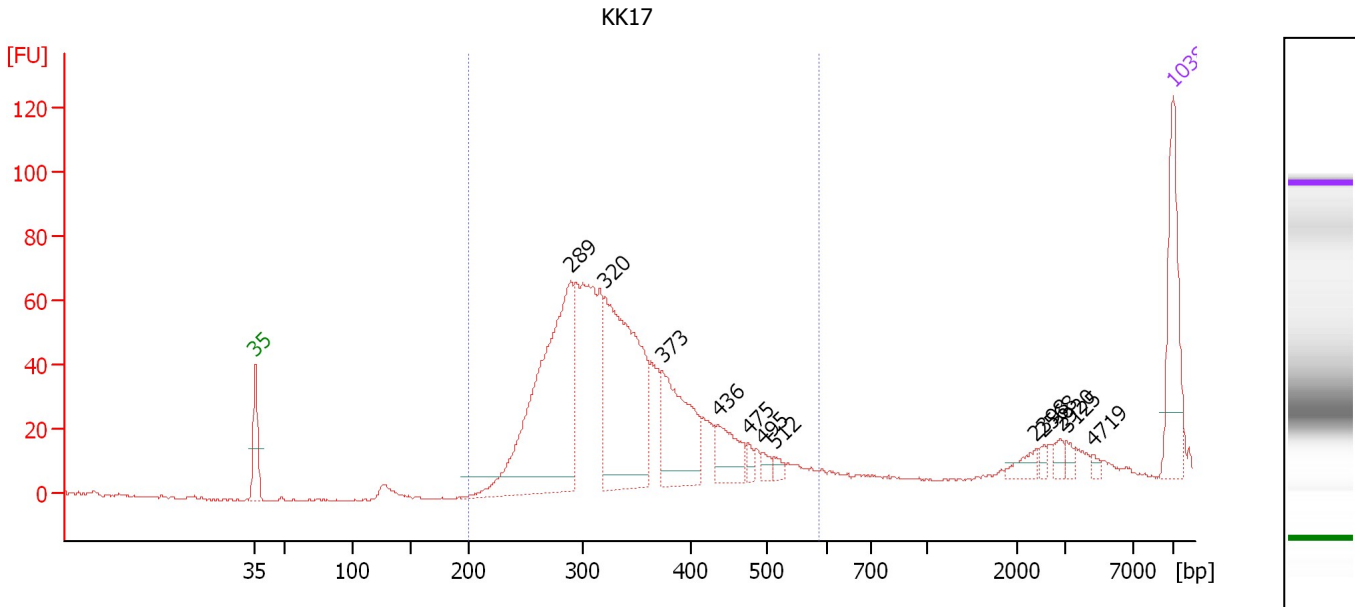
Peak table for Ladder

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	45.24
3	100	150.00	2,272.7	Ladder Peak	50.40
4	150	150.00	1,515.2	Ladder Peak	54.88
5	200	150.00	1,136.4	Ladder Peak	59.27
6	300	150.00	757.6	Ladder Peak	68.01
7	400	150.00	568.2	Ladder Peak	76.23
8	500	150.00	454.5	Ladder Peak	82.01
9	600	150.00	378.8	Ladder Peak	86.64
10	700	150.00	324.7	Ladder Peak	89.94
11	1,000	150.00	227.3	Ladder Peak	94.21
12	2,000	150.00	113.6	Ladder Peak	101.12
13	3,000	150.00	75.8	Ladder Peak	104.70
14	7,000	150.00	32.5	Ladder Peak	109.91
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : KK17

Number of peaks found: 12 Corr. Area 1: 926.2
 Noise: 0.3

Peak table for sample 1 : KK17

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	289	407.70	2,138.7		67.04
3	320	320.48	1,516.0		69.68
4	373	135.98	551.9		74.03
5	436	50.13	174.2		78.31
6	475	8.82	28.1		80.58
7	495	10.31	31.6		81.72
8	512	7.67	22.7		82.58
9	2,398	12.07	7.6		102.55
10	2,568	4.93	2.9		103.16
11	2,920	7.43	3.9		104.42
12	3,125	6.21	3.0		104.87
13	4,719	4.33	1.4		106.94
14	10,380	75.00	10.9	Upper Marker	113.00

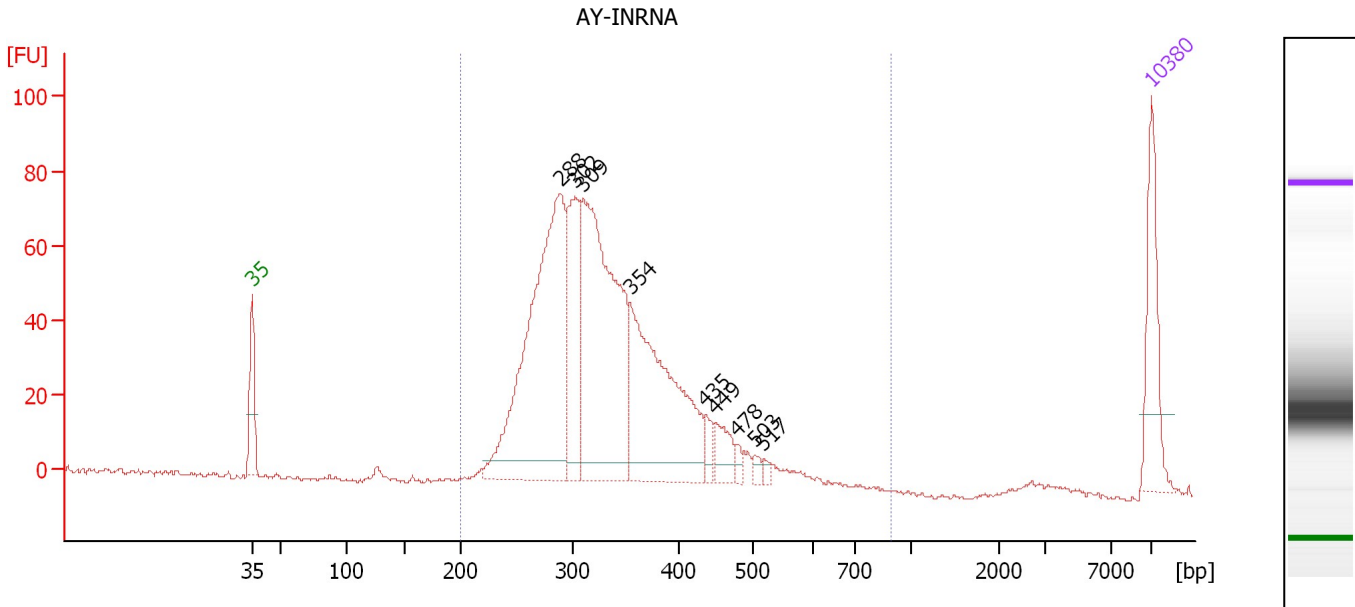
Region table for sample 1 : KK17

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	586	332	926.2	5,331.7	1,124.07	98	17.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : AY-INRNA

Number of peaks found: 9 Corr. Area 1: 1,201.4
 Noise: 0.6

Peak table for sample 2 : AY-INRNA

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	288	526.37	2,767.2		66.98
3	302	165.27	830.3		68.15
4	309	457.01	2,243.3		68.73
5	354	326.84	1,400.5		72.42
6	435	20.16	70.2		78.27
7	449	34.75	117.3		79.06
8	478	8.73	27.6		80.76
9	503	8.43	25.4		82.13
10	517	5.66	16.6		82.79
11	10,380	75.00	10.9	Upper Marker	113.00

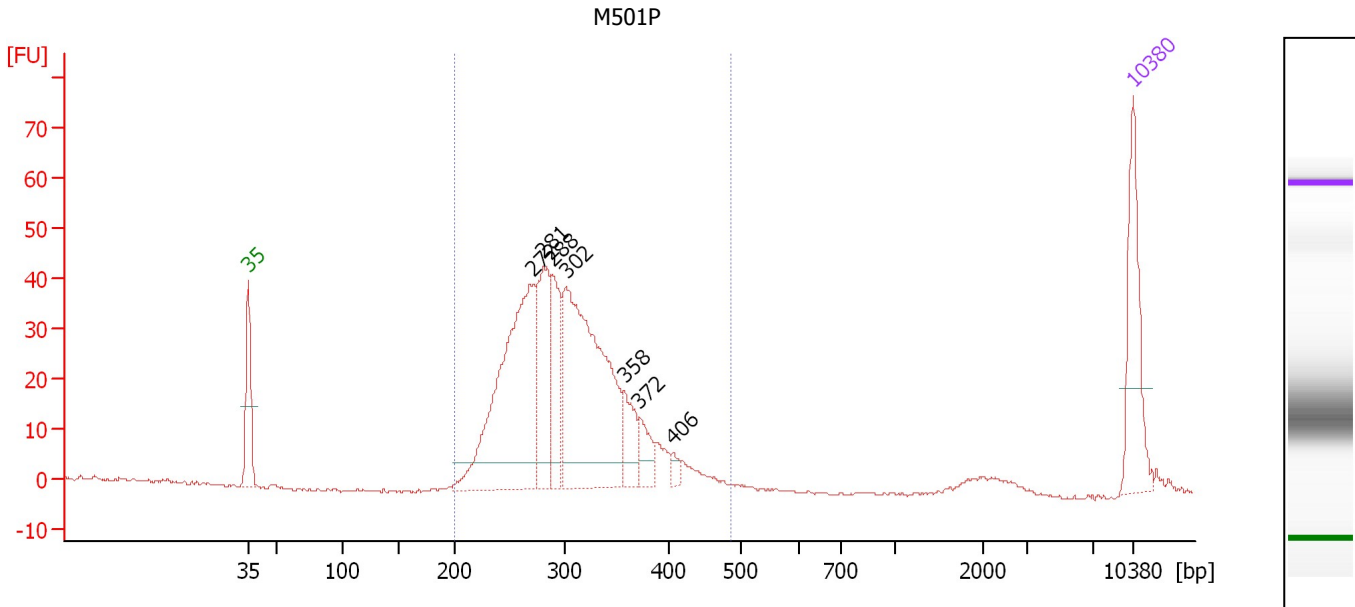
Region table for sample 2 : AY-INRNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	899	335	1,201.4	7,565.6	1,590.98	98	20.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : M501P

Number of peaks found: 7 Corr. Area 1: 613.0
 Noise: 0.3

Peak table for sample 3 : M501P

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	272	353.09	1,969.7		65.53
3	281	128.10	691.3		66.33
4	288	84.44	443.5		67.01
5	302	362.50	1,821.0		68.15
6	358	45.86	194.3		72.75
7	372	30.85	125.5		73.97
8	406	8.71	32.5		76.59
9	10,380	75.00	10.9	Upper Marker	113.00

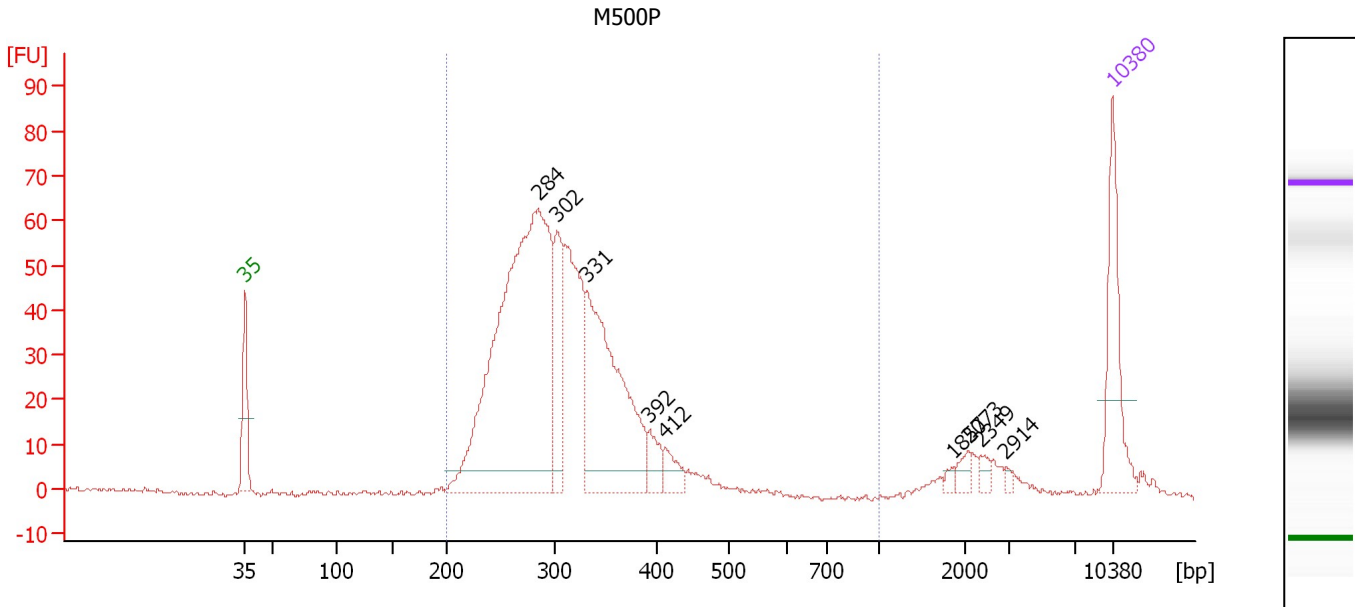
Region table for sample 3 : M501P

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	485	303	613.0	5,277.7	1,025.41	97	15.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : M500P

Number of peaks found: 9 Corr. Area 1: 927.3
 Noise: 0.5

Peak table for sample 4 : M500P

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	284	724.33	3,863.6		66.62
3	302	104.64	525.2		68.17
4	331	301.76	1,382.6		70.54
5	392	27.01	104.3		75.61
6	412	23.49	86.5		76.90
7	1,857	4.55	3.7		100.14
8	2,073	9.96	7.3		101.38
9	2,349	7.73	5.0		102.37
10	2,914	3.03	1.6		104.40
11	10,380	75.00	10.9	Upper Marker	113.00

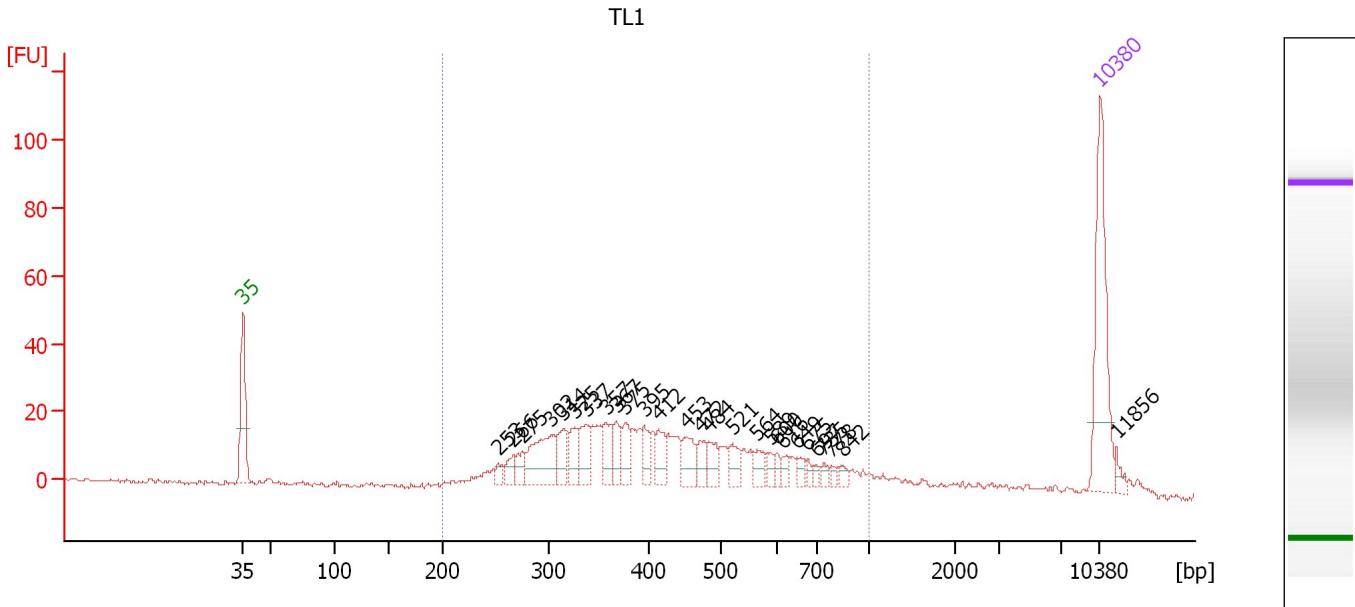
Region table for sample 4 : M500P

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	307	927.3	7,139.8	1,398.94	94	16.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : TL1

Number of peaks found: 27 Corr. Area 1: 539.4
 Noise: 0.5

Peak table for sample 5 : TL1


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	253	6.07	36.4		63.86
3	266	12.36	70.3		65.08
4	275	13.10	72.2		65.83
5	302	55.31	277.5		68.18
6	314	23.05	111.2		69.18
7	325	18.84	87.8		70.09
8	337	24.12	108.4		71.05
9	357	20.31	86.3		72.66
10	367	17.39	71.9		73.49
11	375	19.90	80.4		74.19
12	395	15.07	57.9		75.80
13	412	17.75	65.3		76.93
14	453	22.03	73.7		79.29
15	472	14.04	45.1		80.37
16	484	15.52	48.6		81.07
17	521	14.28	41.5		82.99
18	564	10.41	28.0		84.99
19	589	6.67	17.2		86.12
20	600	5.82	14.7		86.65
21	616	6.34	15.6		87.17
22	649	6.80	15.9		88.26
23	675	4.53	10.2		89.13
24	697	3.91	8.5		89.83
25	735	4.49	9.3		90.44

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad


Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : TL1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	778	3.56	6.9		91.05
27	842	5.30	9.5		91.96
28	 10,380	75.00	10.9	Upper Marker	113.00
29	11,856	0.00	0.0		114.35

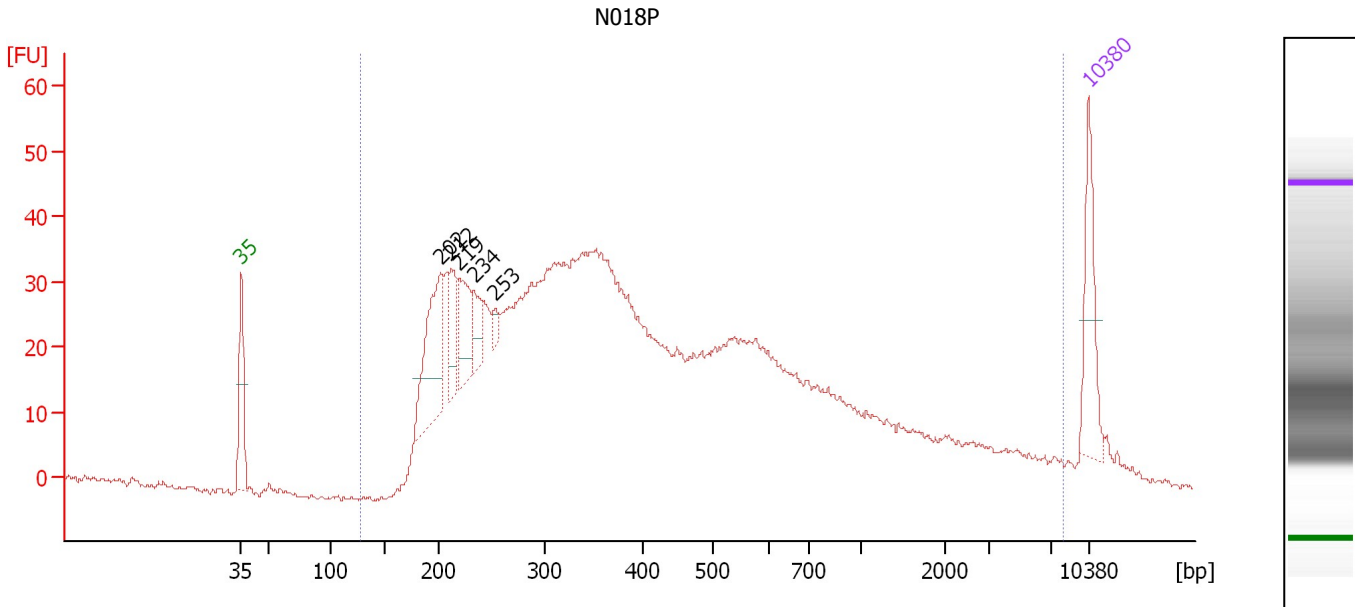
Region table for sample 5 : TL1

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	449	539.4	2,282.0	 582.54	87	35.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : N018P

Number of peaks found: 5 Corr. Area 1: 1,343.2
 Noise: 0.4

Peak table for sample 6 : N018P

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	202	179.21	1,341.8		59.48
3	212	68.16	486.1		60.36
4	219	87.09	602.6		60.93
5	234	42.27	274.1		62.21
6	253	14.80	88.5		63.93
7	10,380	75.00	10.9	Upper Marker	113.00

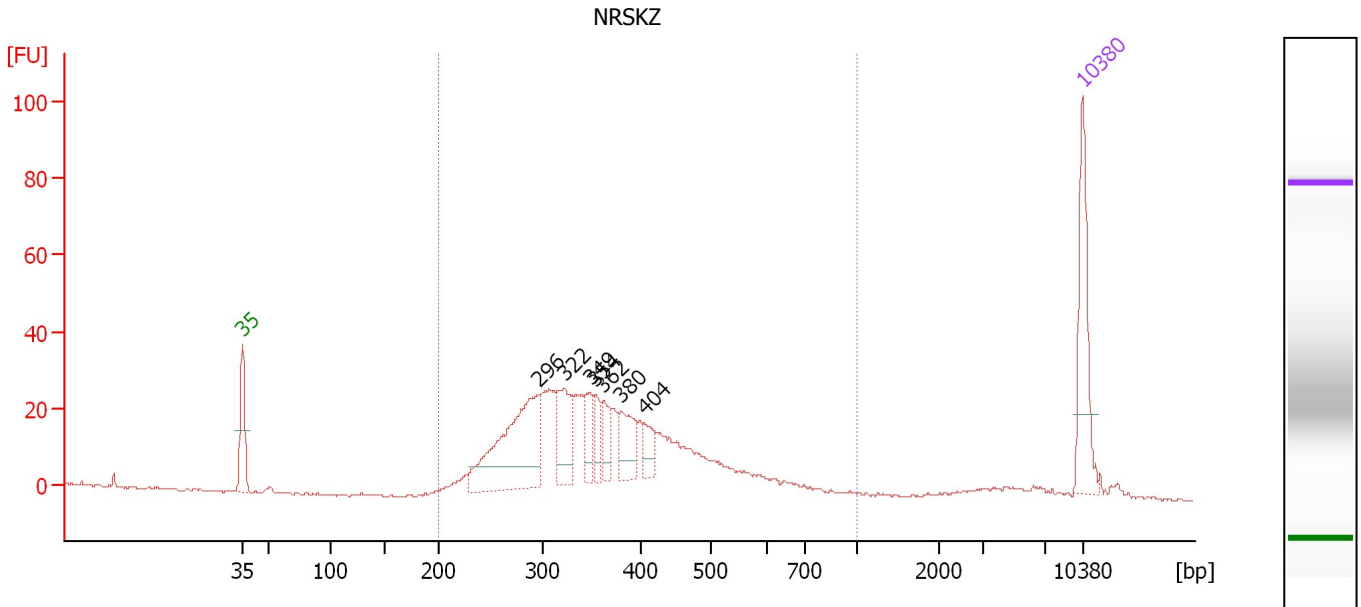
Region table for sample 6 : N018P

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
128	8,115	643	1,343.2	15,960.4	3,497.13	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NRSKZ

Number of peaks found: 7 Corr. Area 1: 570.6
 Noise: 0.3

Peak table for sample 7 : NRSKZ

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	296	208.71	1,068.3		67.67
3	322	71.78	338.0		69.80
4	349	34.20	148.6		72.02
5	354	28.26	121.1		72.42
6	362	30.35	127.1		73.09
7	380	50.14	199.9		74.60
8	404	27.27	102.3		76.47
9	10,380	75.00	10.9	Upper Marker	113.00

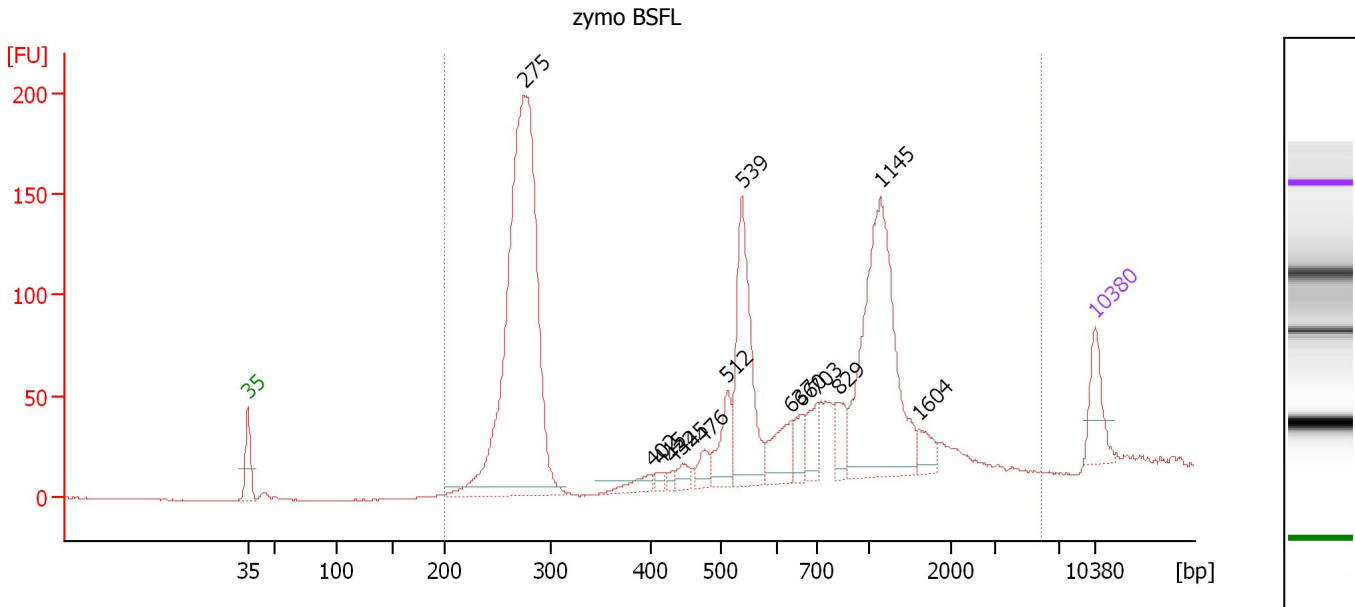
Region table for sample 7 : NRSKZ

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	373	570.6	3,812.9	860.32	95	27.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : zymo BSFL

Number of peaks found: 14 Corr. Area 1: 1,839.6
 Noise: 0.2

Peak table for sample 8 : zymo BSFL

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	275	1,580.63	8,717.1		65.81
3	402	41.03	154.5		76.37
4	415	16.94	61.9		77.08
5	432	11.23	39.4		78.09
6	445	29.85	101.6		78.84
7	476	39.99	127.4		80.60
8	512	97.24	287.6		82.58
9	539	344.41	968.3		83.81
10	637	94.09	223.8		87.86
11	660	46.28	106.3		88.61
12	703	72.26	155.8		89.97
13	829	62.41	114.0		91.78
14	1,145	553.42	732.1		95.21
15	1,604	40.46	38.2		98.38
16	10,380	75.00	10.9	Upper Marker	113.00

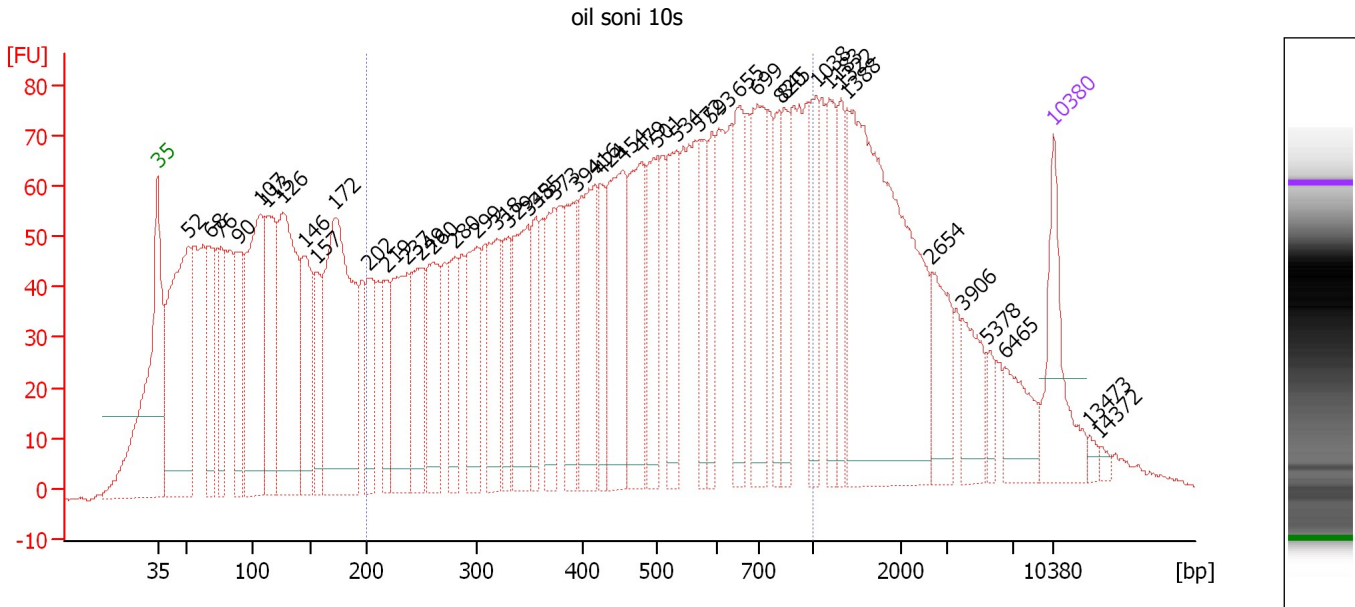
Region table for sample 8 : zymo BSFL

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	5,980	703	1,839.6	10,947.4	2,881.42	99	67.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : oil soni 10s

Number of peaks found: 45 Corr. Area 1: 2,571.8
 Noise: 0.5

Peak table for sample 9 : oil soni 10s

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	52	367.59	10,761.0		45.42
3	68	111.28	2,492.0		47.06
4	76	108.51	2,161.8		47.93
5	90	104.03	1,756.4		49.34
6	107	275.25	3,896.8		51.03
7	113	181.07	2,424.8		51.58
8	126	306.45	3,673.3		52.77
9	146	144.95	1,506.5		54.50
10	157	78.51	759.5		55.46
11	172	383.27	3,372.5		56.83
12	202	85.82	642.7		59.47
13	219	67.35	465.9		60.93
14	237	163.80	1,045.9		62.53
15	249	107.93	657.4		63.53
16	260	116.64	679.1		64.54
17	280	77.40	419.5		66.23
18	299	117.17	593.0		67.96
19	318	98.01	466.6		69.51
20	329	65.79	302.7		70.43
21	348	133.41	581.4		71.93
22	355	66.13	281.9		72.57
23	373	82.99	337.4		73.98
24	394	98.55	378.7		75.76
25	416	138.92	505.5		77.18

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
 Modified: 4/5/2017 2:49:20 PM

Electropherogram Summary Continued ...

... Peak table for sample 9 : oil soni 10s

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	424	61.86	221.3		77.59
27	454	154.95	517.6		79.32
28	479	133.87	423.6		80.78
29	501	103.19	312.0		82.06
30	534	100.21	284.5		83.57
31	572	64.10	169.8		85.35
32	593	54.58	139.5		86.31
33	655	89.25	206.5		88.45
34	699	130.96	283.8		89.91
35	820	53.90	99.6		91.64
36	845	57.62	103.3		92.01
37	1,038	65.28	95.3		94.47
38	1,183	66.56	85.2		95.48
39	1,322	50.09	57.4		96.44
40	1,388	399.97	436.6		96.89
41	2,654	63.35	36.2		103.46
42	3,906	50.37	19.5		105.88
43	5,378	17.27	4.9		107.80
44	6,465	46.19	10.8		109.21
45	10,380	75.00	10.9	Upper Marker	113.00
46	13,473	0.00	0.0		115.83
47	14,372	0.00	0.0		116.65

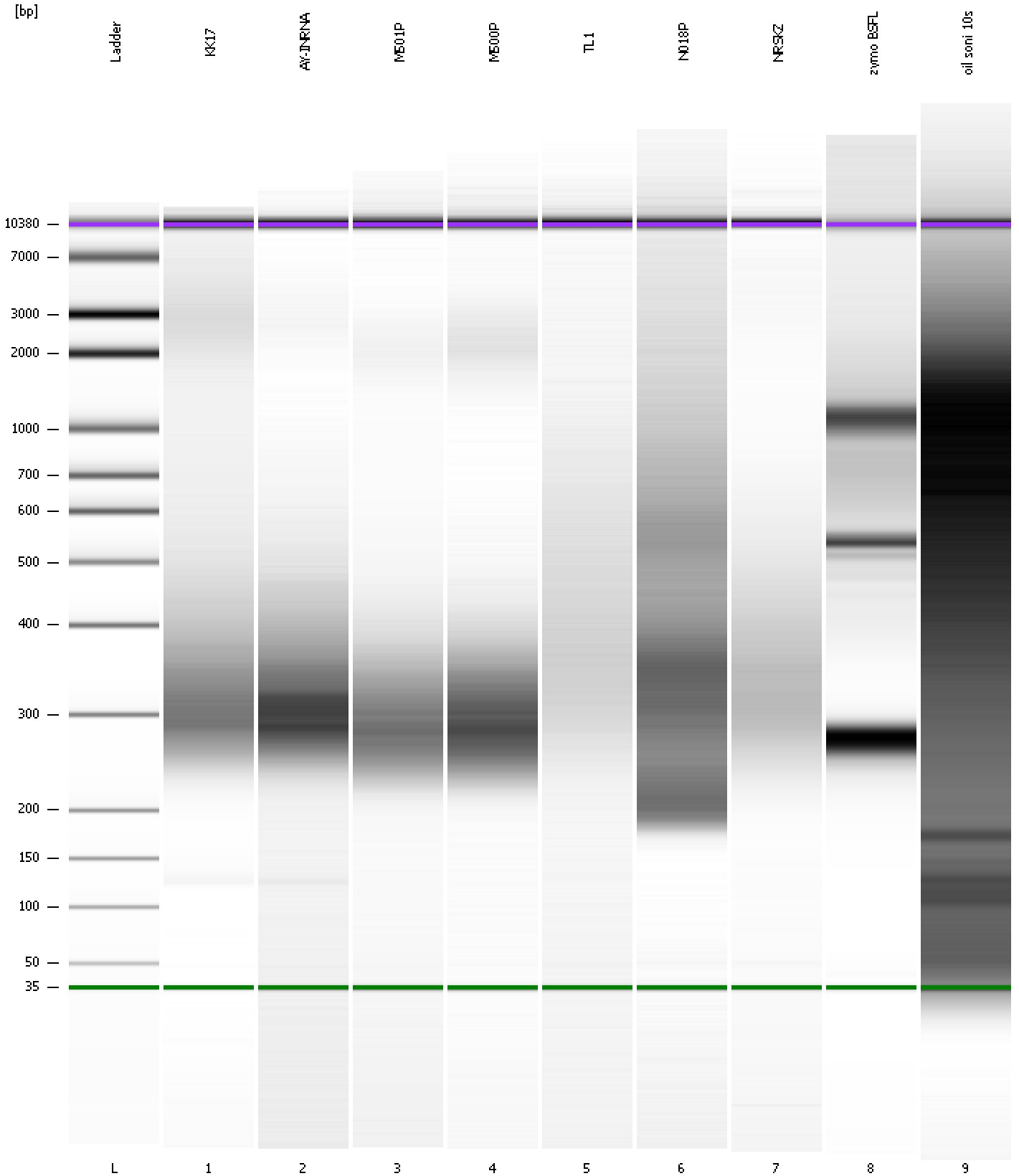
Region table for sample 9 : oil soni 10s

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	493	2,571.8	13,172.0	3,352.92	53	40.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad

Created: 4/5/2017 2:11:24 PM
Modified: 4/5/2017 2:49:20 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 4/5/2017 2:11:24 PM
 Data Path: C:\...oanalyzer\2100 expert\data\2017-04-05\2017-04-05_002_ek.xad Modified: 4/5/2017 2:49:20 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run aborted on port 1		Instrument	Run		4/5/2017 2:48:25 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\2017-04-05\2017-04-05_002.xad)		Instrument	Run		4/5/2017 2:11:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/5/2017 2:11:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/5/2017 2:11:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/5/2017 2:11:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/5/2017 2:11:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/5/2017 2:11:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/5/2017 2:11:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1