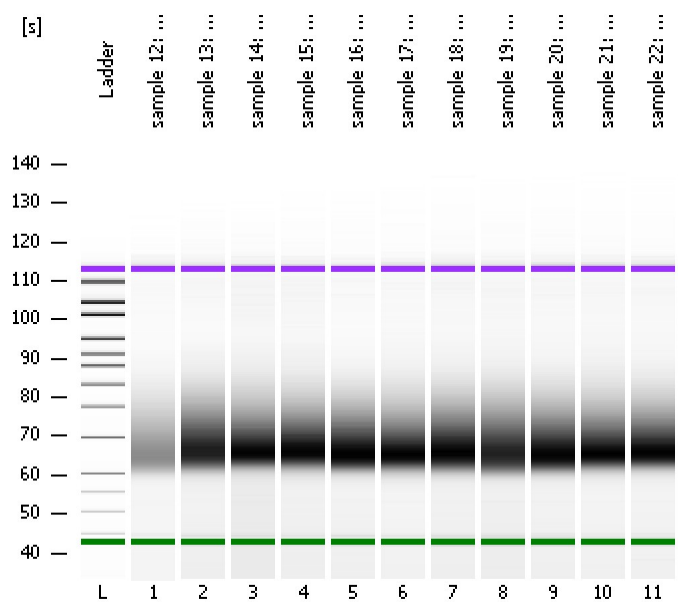


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
Modified: 10/13/2015 12:57:09 PM

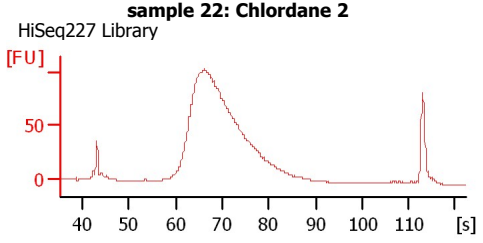
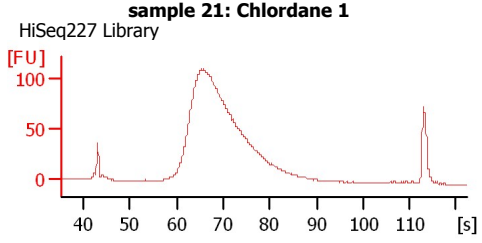
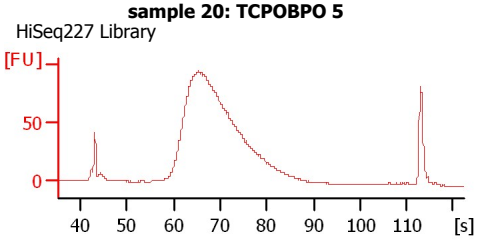
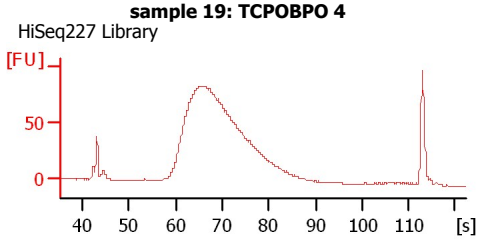
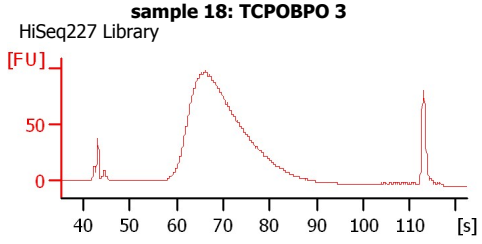
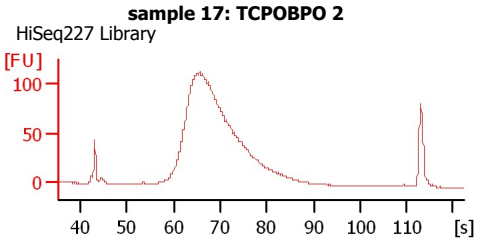
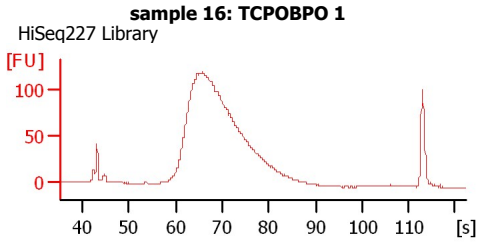
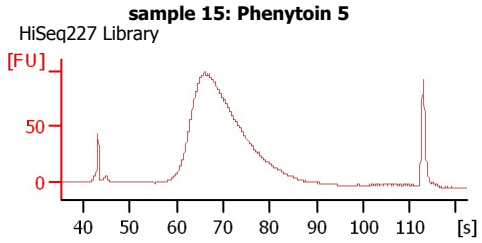
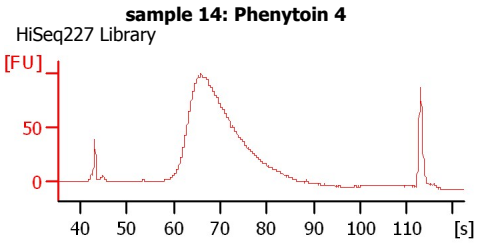
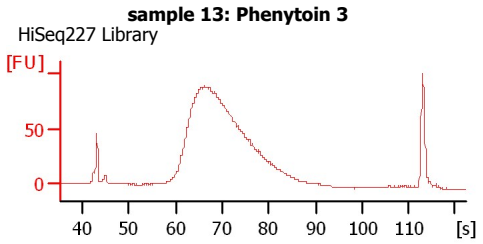
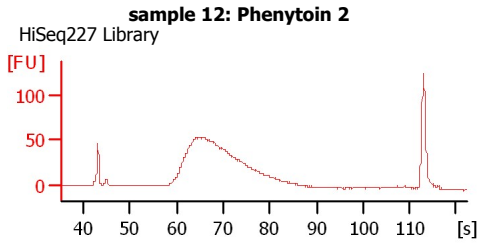
Electrophoresis File Run Summary



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:



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
Modified: 10/13/2015 12:57:09 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 12: Phenytoin 2	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 13: Phenytoin 3	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 14: Phenytoin 4	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 15: Phenytoin 5	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 16: TCPOBPO 1	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 17: TCPOBPO 2	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 18: TCPOBPO 3	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 19: TCPOBPO 4	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 20: TCPOBPO 5	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 21: Chlordane 1	HiSeq227 Library	<input type="checkbox"/>	✓			
sample 22: Chlordane 2	HiSeq227 Library	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
Modified: 10/13/2015 12:57:09 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

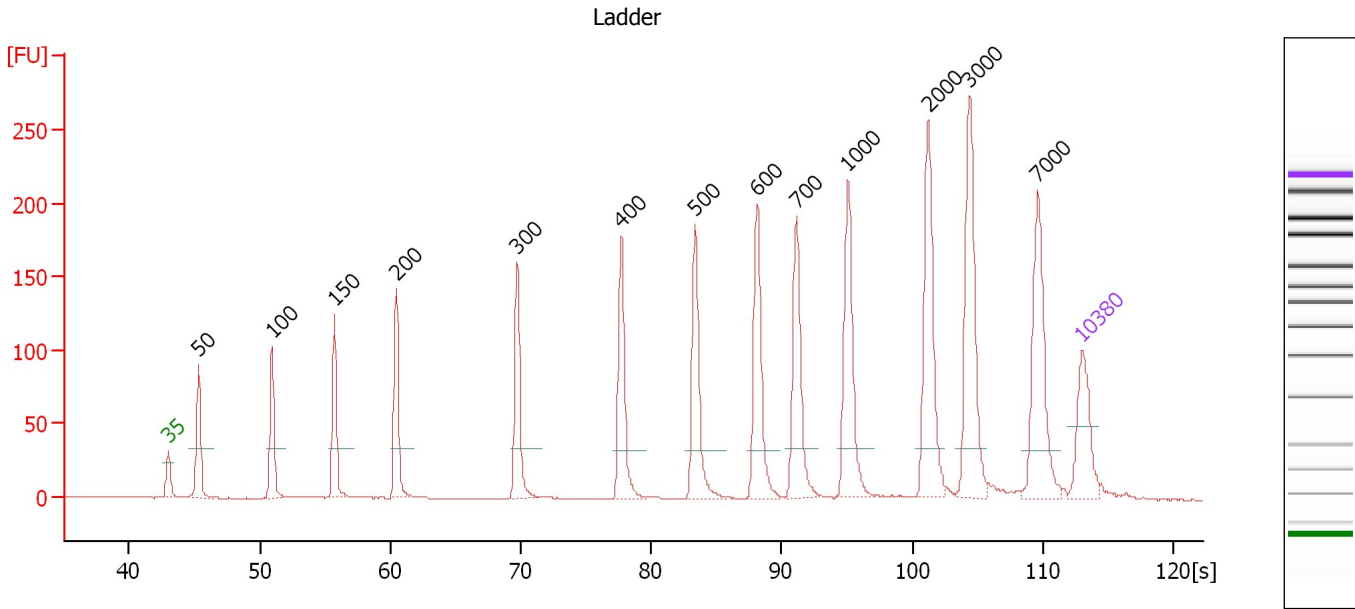
Ladder

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:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

Peak table for Ladder

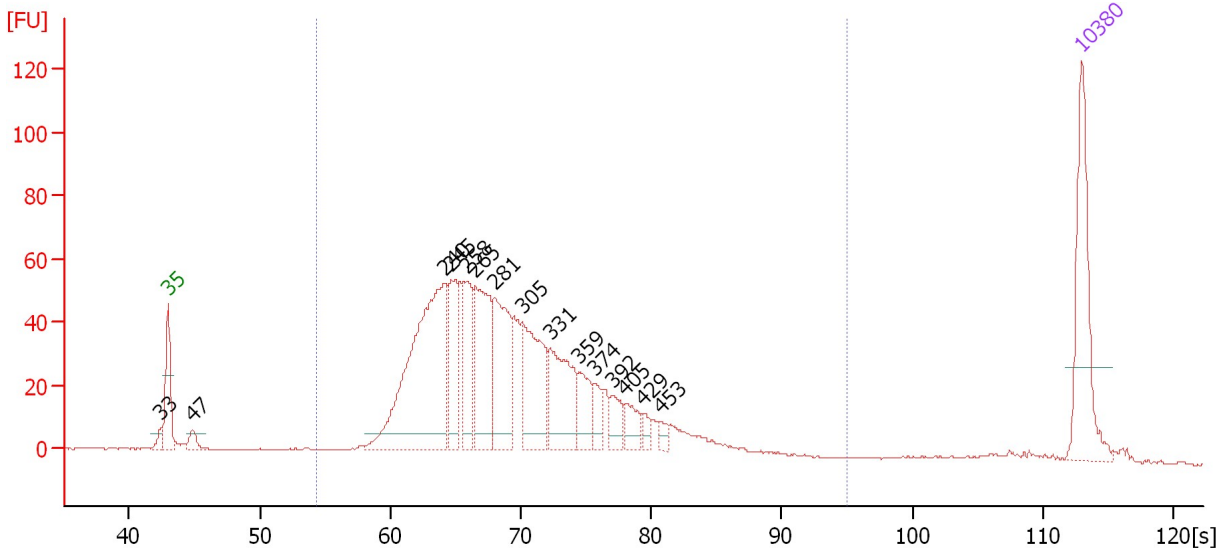
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.34
3	100	150.00	2,272.7	Ladder Peak	50.96
4	150	150.00	1,515.2	Ladder Peak	55.72
5	200	150.00	1,136.4	Ladder Peak	60.49
6	300	150.00	757.6	Ladder Peak	69.75
7	400	150.00	568.2	Ladder Peak	77.71
8	500	150.00	454.5	Ladder Peak	83.37
9	600	150.00	378.8	Ladder Peak	88.14
10	700	150.00	324.7	Ladder Peak	91.15
11	1,000	150.00	227.3	Ladder Peak	95.06
12	2,000	150.00	113.6	Ladder Peak	101.22
13	3,000	150.00	75.8	Ladder Peak	104.41
14	7,000	150.00	32.5	Ladder Peak	109.58
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...

sample 12: Phenytoin 2 [HiSeq227 Library]



Overall Results for sample 1 : sample 12: Phenytoin 2

Number of peaks found: 15 Corr. Area 1: 1,184.6
 Noise: 0.2

Peak table for sample 1 : sample 12: Phenytoin 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.45
2	35	125.00	5,411.3	Lower Marker	43.00
3	47	12.67	408.5		44.87
4	240	287.98	1,816.0		64.22
5	245	73.76	455.7		64.68
6	258	62.92	369.5		65.86
7	265	113.39	647.3		66.55
8	281	98.65	531.6		68.01
9	305	102.37	508.5		70.15
10	331	87.00	397.7		72.25
11	359	35.20	148.6		74.44
12	374	16.11	65.3		75.63
13	392	20.39	78.9		77.04
14	405	20.59	77.0		78.00
15	429	8.04	28.4		79.37
16	453	7.04	23.5		80.74
17	10,380	75.00	10.9	Upper Marker	113.00

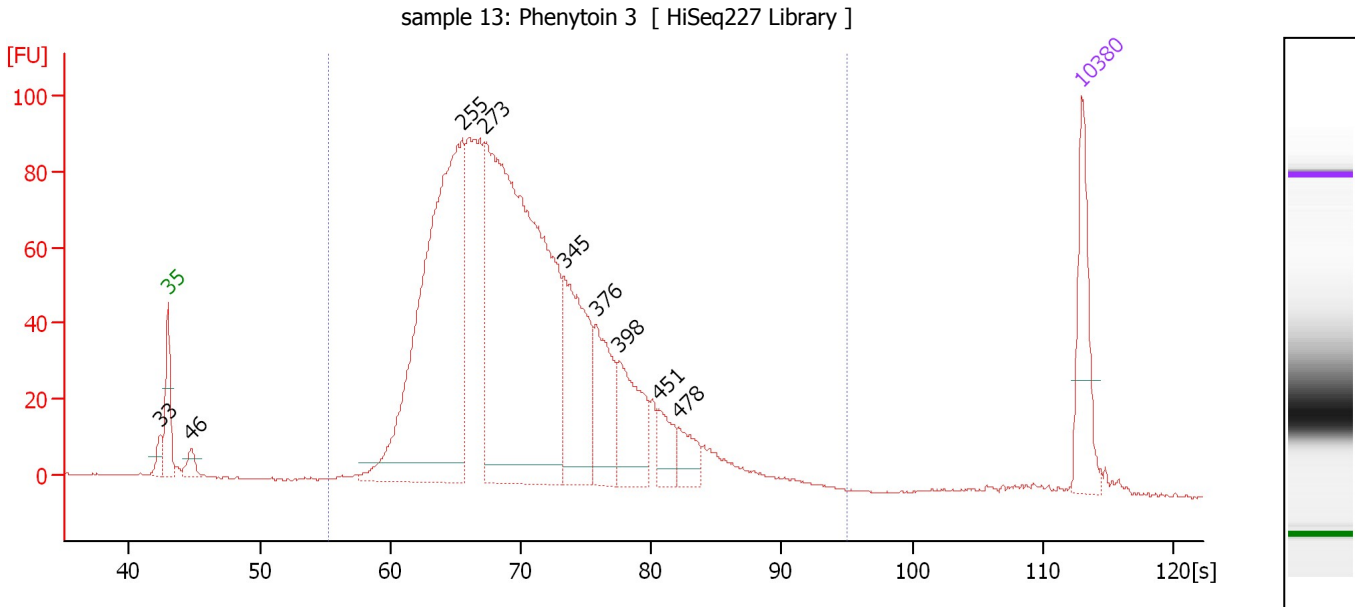
Region table for sample 1 : sample 12: Phenytoin 2

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
54.38	95.06	305	1,184.6	6,236.9	1,151.74	95	28.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 13: Phenytoin 3

Number of peaks found: 9 Corr. Area 1: 1,928.2
 Noise: 0.2

Peak table for sample 2 : sample 13: Phenytoin 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.40
2	35	125.00	5,411.3	Lower Marker	43.00
3	46	22.79	745.1		44.77
4	255	729.03	4,338.9		65.54
5	273	914.36	5,081.3		67.22
6	345	195.56	858.2		73.35
7	376	107.01	431.6		75.77
8	398	104.04	395.7		77.58
9	451	39.55	132.8		80.60
10	478	34.47	109.2		82.14
11	10,380	75.00	10.9	Upper Marker	113.00

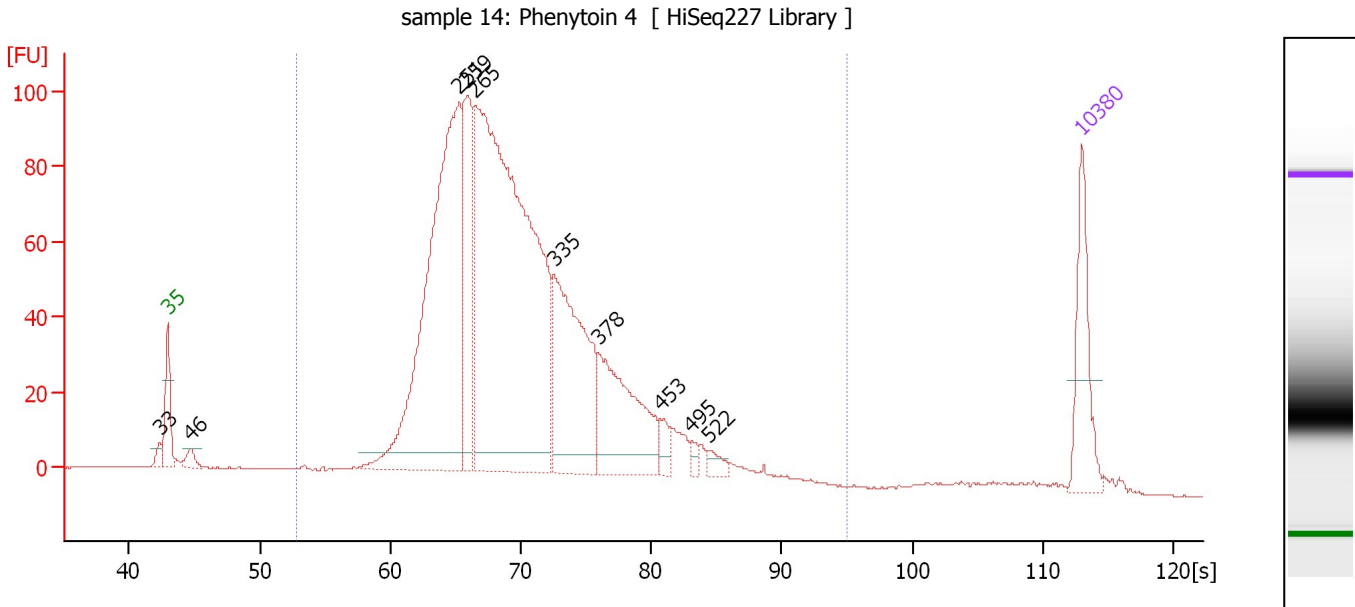
Region table for sample 2 : sample 13: Phenytoin 3

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
55.24	95.06	315	1,928.2	12,836.5	2,453.74	97	27.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 14: Phenytoin 4

Number of peaks found: 10 Corr. Area 1: 1,854.4
 Noise: 0.2

Peak table for sample 3 : sample 14: Phenytoin 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.34
2	35	125.00	5,411.3	Lower Marker	43.00
3	46	17.55	579.5		44.70
4	251	685.83	4,133.4		65.25
5	259	194.41	1,139.4		65.91
6	265	1,032.18	5,898.4		66.52
7	335	282.25	1,275.6		72.56
8	378	187.59	752.1		75.95
9	453	19.04	63.7		80.71
10	495	9.66	29.5		83.11
11	522	13.34	38.7		84.43
12	10,380	75.00	10.9	Upper Marker	113.00

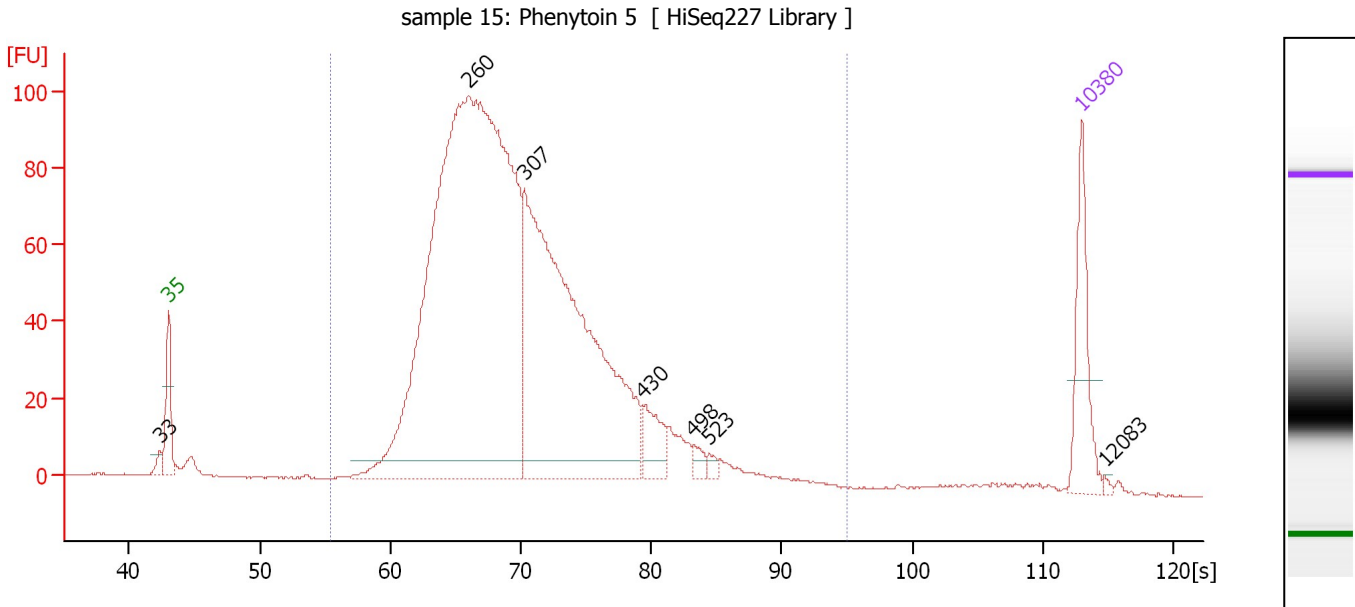
Region table for sample 3 : sample 14: Phenytoin 4

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
52.86	95.06	310	1,854.4	13,742.2	2,591.08	96	27.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 15: Phenytoin 5

Number of peaks found: 7 Corr. Area 1: 1,888.6
 Noise: 0.2

Peak table for sample 4 : sample 15: Phenytoin 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.38
2	35	125.00	5,411.3	Lower Marker	43.00
3	260	1,639.05	9,551.2		66.05
4	307	809.35	3,995.3		70.30
5	430	49.67	175.2		79.39
6	498	13.05	39.7		83.26
7	523	7.60	22.0		84.45
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,083	0.00	0.0		114.72

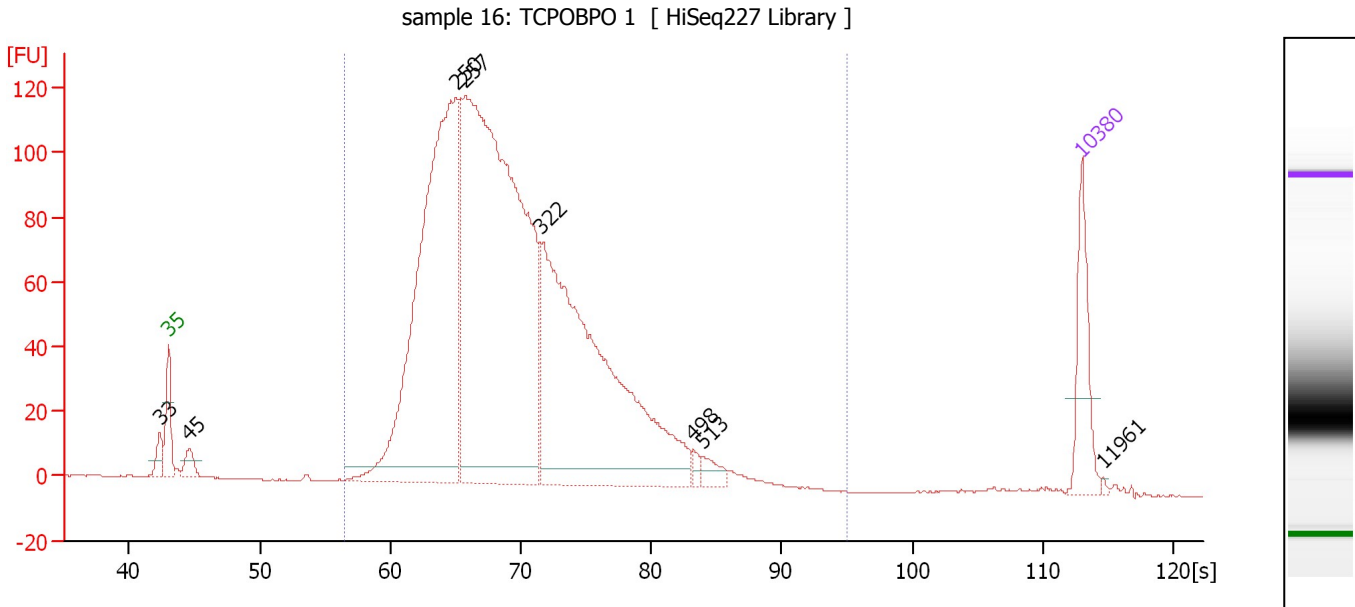
Region table for sample 4 : sample 15: Phenytoin 5

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
55.49	95.06	312	1,888.6	13,669.6	2,600.56	97	27.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 16: TCPOBPO 1

Number of peaks found: 8 Corr. Area 1: 2,283.4
 Noise: 0.2

Peak table for sample 5 : sample 16: TCPOBPO 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.37
2	35	125.00	5,411.3	Lower Marker	43.00
3	45	29.05	972.6		44.60
4	250	911.15	5,529.1		65.09
5	257	1,380.32	8,137.6		65.77
6	322	818.72	3,847.6		71.53
7	498	10.21	31.1		83.26
8	513	21.00	62.1		83.98
9	10,380	75.00	10.9	Upper Marker	113.00
10	11,961	0.00	0.0		114.60

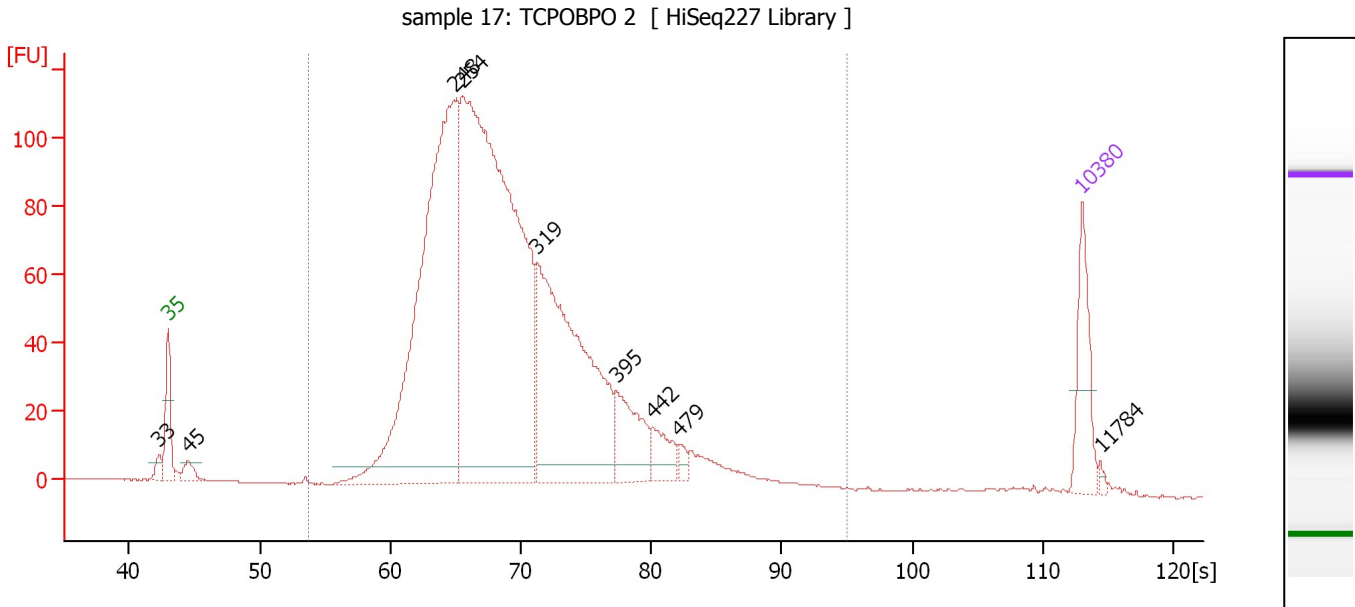
Region table for sample 5 : sample 16: TCPOBPO 1

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
56.58	95.06	302	2,283.4	16,638.6	3,100.21	97	24.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 17: TCPOBPO 2

Number of peaks found: 9 Corr. Area 1: 2,042.4
 Noise: 0.1

Peak table for sample 6 : sample 17: TCPOBPO 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.31
2	35	125.00	5,411.3	Lower Marker	43.00
3	45	25.76	866.3		44.57
4	248	985.54	6,022.2		64.93
5	254	1,399.11	8,336.2		65.52
6	319	578.02	2,742.0		71.29
7	395	107.84	413.6		77.31
8	442	48.29	165.4		80.10
9	479	13.38	42.4		82.16
10	10,380	75.00	10.9	Upper Marker	113.00
11	11,784	0.00	0.0		114.42

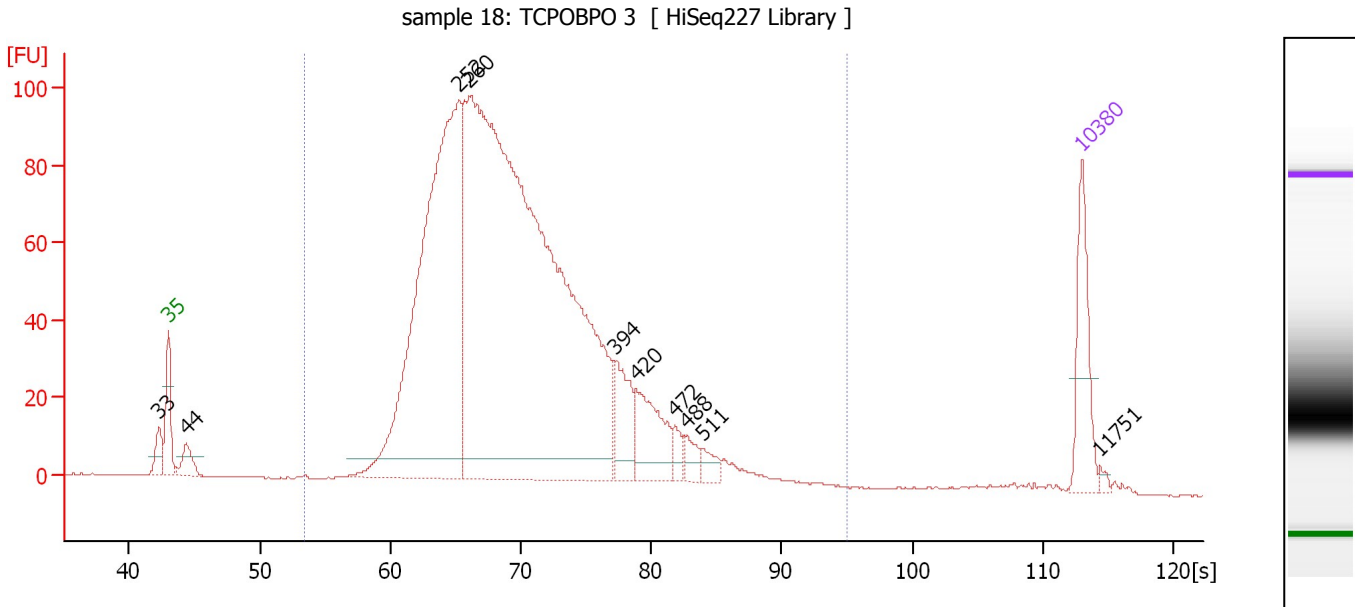
Region table for sample 6 : sample 17: TCPOBPO 2

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
53.68	95.06	303	2,042.4	17,285.0	3,200.44	98	28.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 18: TCPOBPO 3

Number of peaks found: 10 Corr. Area 1: 1,953.5
 Noise: 0.1

Peak table for sample 7 : sample 18: TCPOBPO 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.31
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	38.09	1,314.7		44.39
4	252	933.27	5,617.9		65.28
5	260	1,960.61	11,414.2		66.07
6	394	79.09	304.4		77.21
7	420	96.55	348.3		78.84
8	472	19.37	62.1		81.81
9	488	21.19	65.8		82.70
10	511	18.69	55.4		83.89
11	10,380	75.00	10.9	Upper Marker	113.00
12	11,751	0.00	0.0		114.39

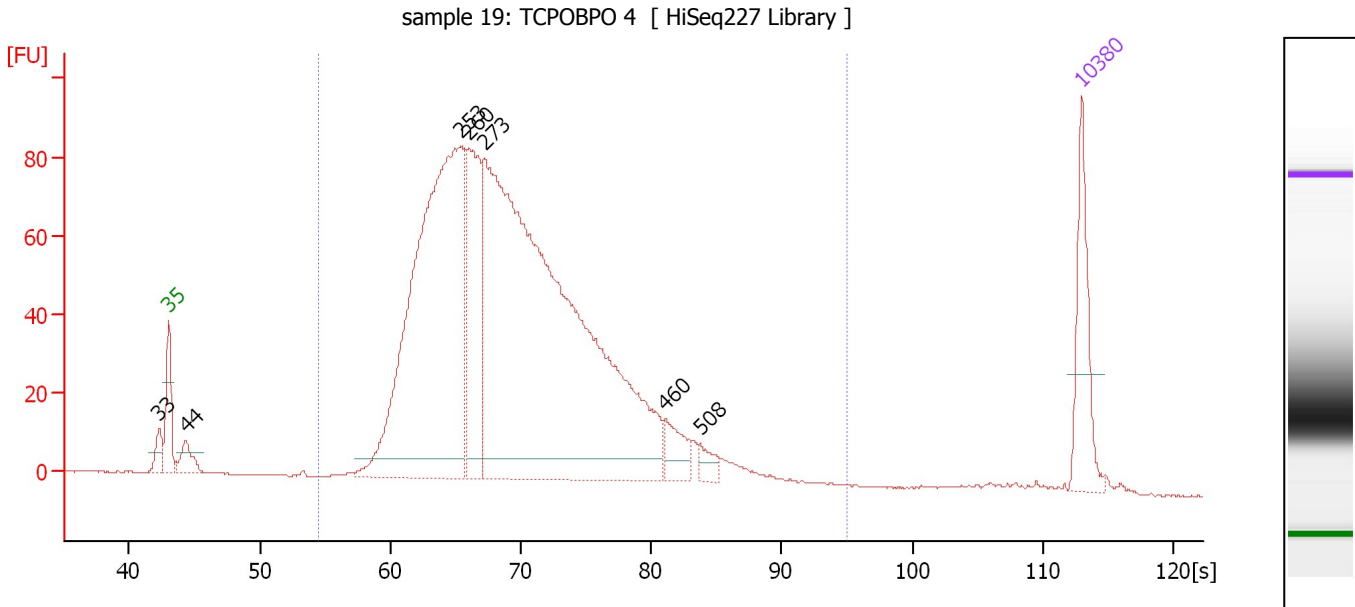
Region table for sample 7 : sample 18: TCPOBPO 3

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
53.40	95.06	309	1,953.5	16,399.2	3,083.78	97	27.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 19: TCPOBPO 4

Number of peaks found: 7 Corr. Area 1: 1,787.9
 Noise: 0.1

Peak table for sample 8 : sample 19: TCPOBPO 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.30
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	37.36	1,297.1		44.35
4	253	883.85	5,295.7		65.39
5	260	227.59	1,326.9		66.03
6	273	1,414.80	7,858.0		67.23
7	460	41.54	136.9		81.09
8	508	17.79	53.1		83.73
9	10,380	75.00	10.9	Upper Marker	113.00

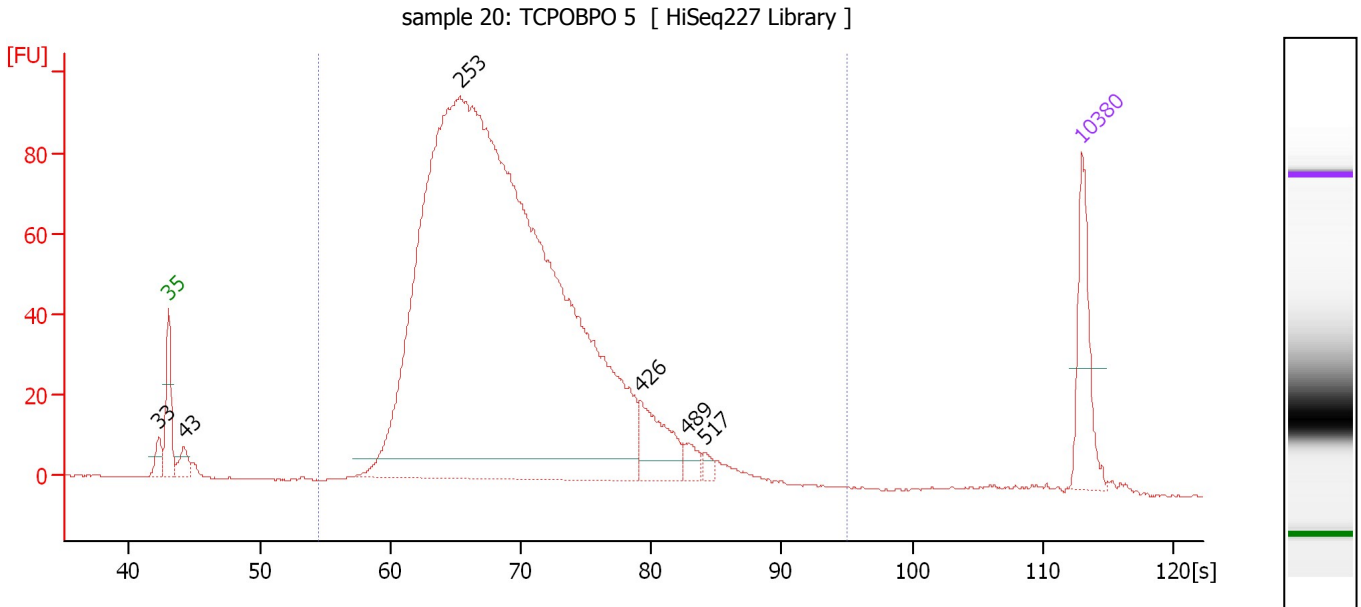
Region table for sample 8 : sample 19: TCPOBPO 4

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
54.53	95.06	307	1,787.9	13,676.8	2,545.33	97	28.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 20: TCPOBPO 5

Number of peaks found: 6 Corr. Area 1: 1,829.7
 Noise: 0.2

Peak table for sample 9 : sample 20: TCPOBPO 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.30
2	35	125.00	5,411.3	Lower Marker	43.00
3	43	31.44	1,114.4		44.21
4	253	2,918.99	17,495.6		65.38
5	426	87.43	310.6		79.21
6	489	21.02	65.2		82.73
7	517	9.89	29.0		84.19
8	10,380	75.00	10.9	Upper Marker	113.00

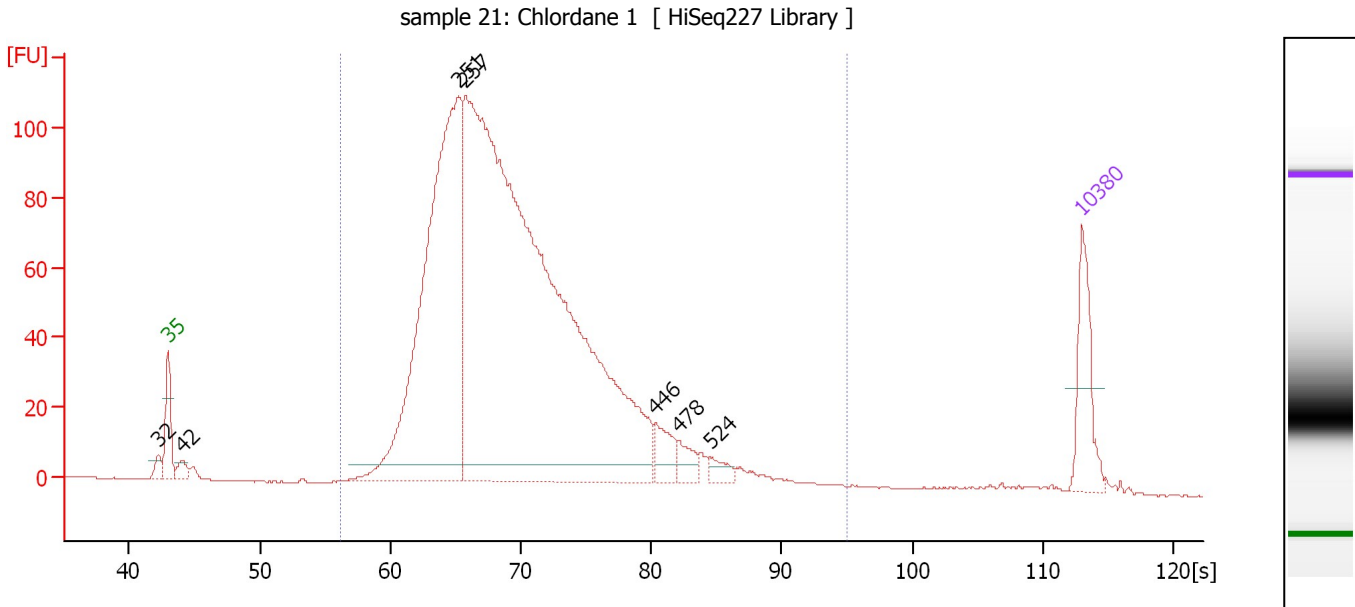
Region table for sample 9 : sample 20: TCPOBPO 5

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
54.58	95.06	304	1,829.7	15,930.3	2,956.65	97	27.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 21: Chlordane 1

Number of peaks found: 7 Corr. Area 1: 1,950.7
 Noise: 0.2

Peak table for sample 10 : sample 21: Chlordane 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.24
2	35	125.00	5,411.3	Lower Marker	43.00
3	42	23.16	832.2		44.12
4	251	907.58	5,473.5		65.23
5	257	2,192.34	12,939.5		65.74
6	446	45.75	155.4		80.31
7	478	27.31	86.5		82.14
8	524	20.00	57.8		84.52
9	10,380	75.00	10.9	Upper Marker	113.00

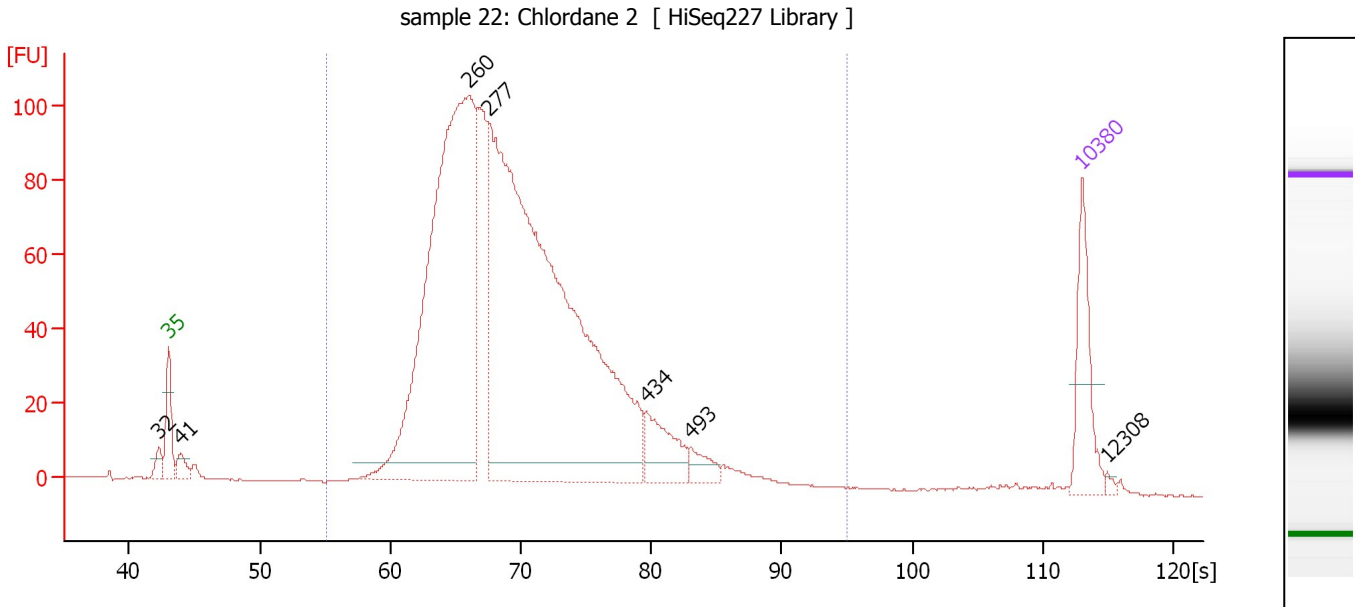
Region table for sample 10 : sample 21: Chlordane 1

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
56.16	95.06	309	1,950.7	16,276.1	3,066.24	97	28.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 22: Chlordane 2

Number of peaks found: 7 Corr. Area 1: 1,816.3
 Noise: 0.1

Peak table for sample 11 : sample 22: Chlordane 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.28
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	23.48	862.3		43.97
4	260	993.30	5,793.3		66.03
5	277	1,388.29	7,595.1		67.62
6	434	73.72	257.5		79.62
7	493	26.02	79.9		83.00
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,308	0.00	0.0		114.95

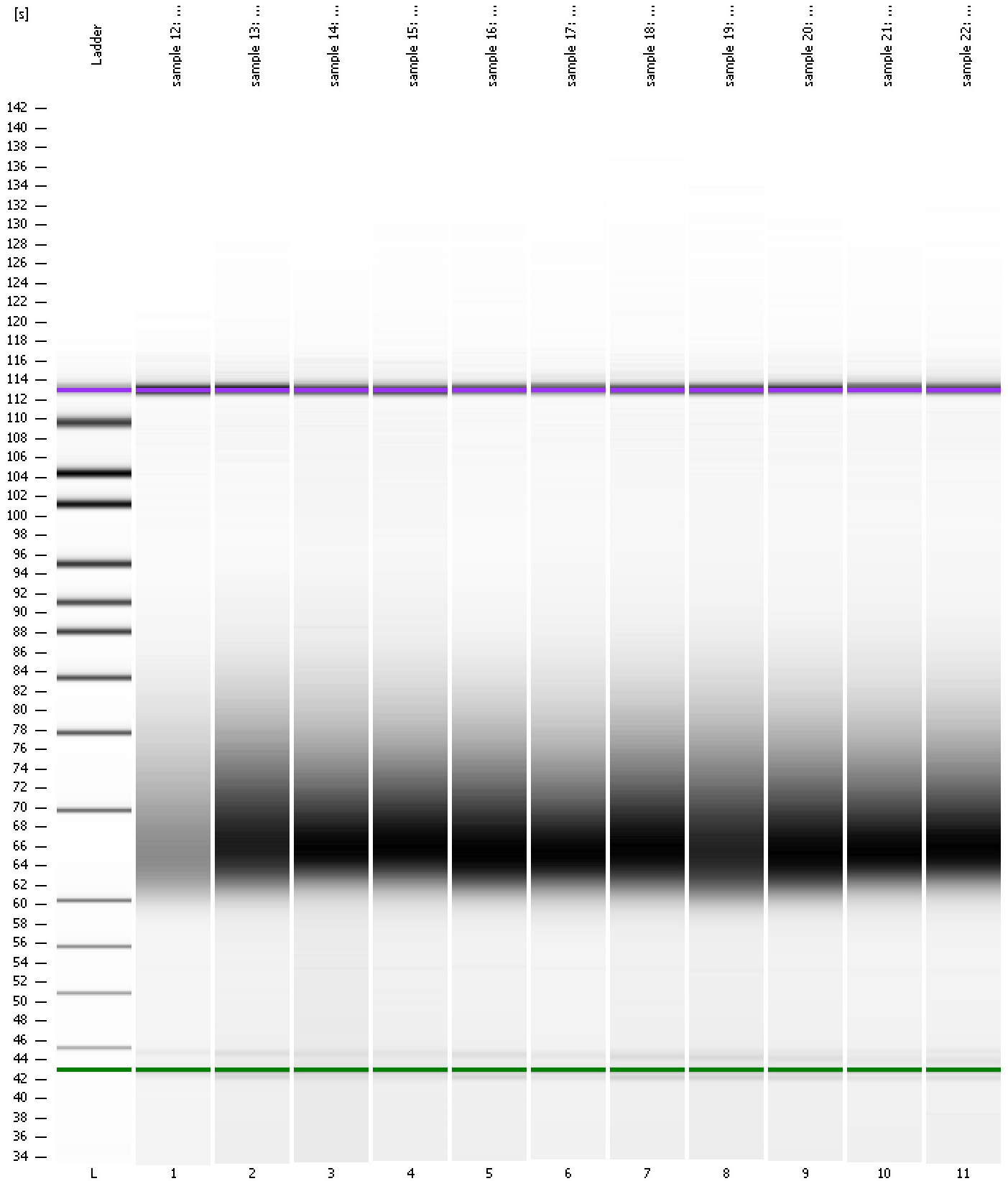
Region table for sample 11 : sample 22: Chlordane 2

From [s]	To [s]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
55.06	95.06	308	1,816.3	14,043.7	2,665.33	97	26.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
Modified: 10/13/2015 12:57:09 PM

Gel Image

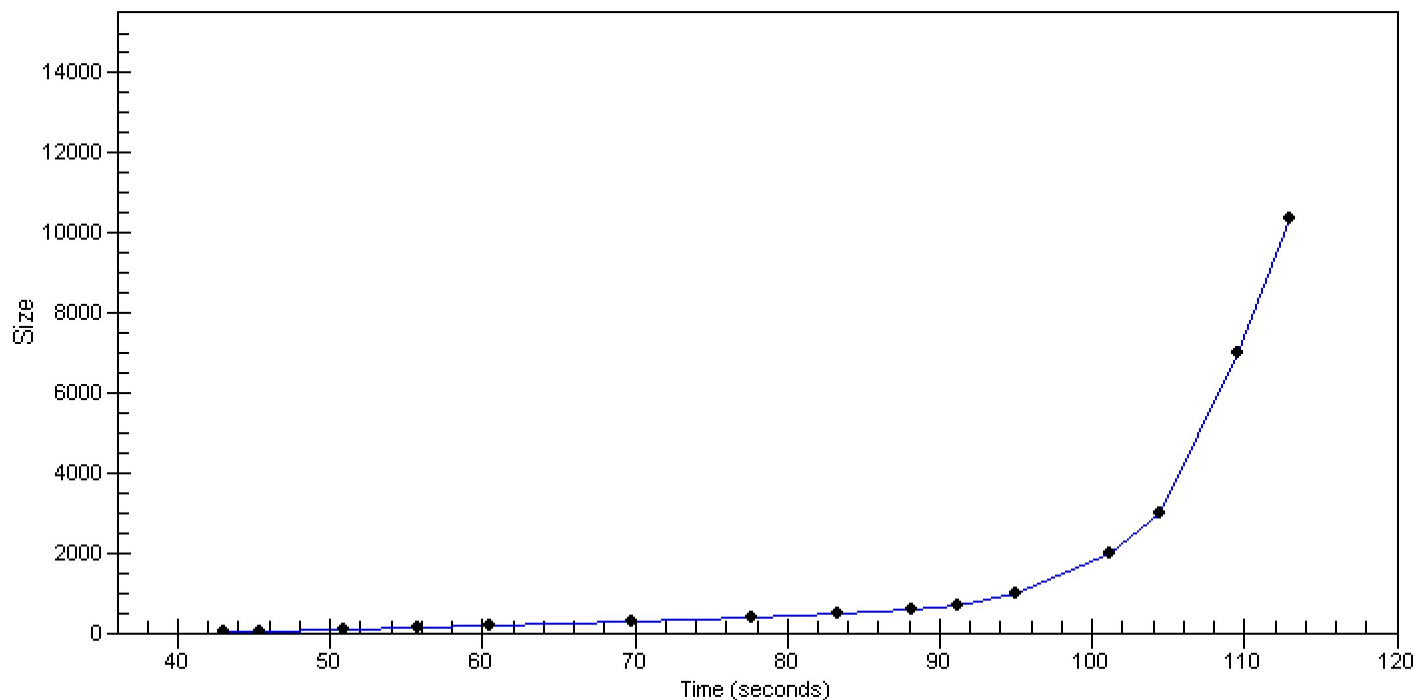


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
Modified: 10/13/2015 12:57:09 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad

Created: 10/13/2015 12:14:05 PM
 Modified: 10/13/2015 12:57:09 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		10/13/2015 12:54:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-10-13\2015-10-13_002.xad)		Instrument	Run		10/13/2015 12:14:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/13/2015 12:14:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/13/2015 12:14:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/13/2015 12:14:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/13/2015 12:14:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/13/2015 12:14:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/13/2015 12:14:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1