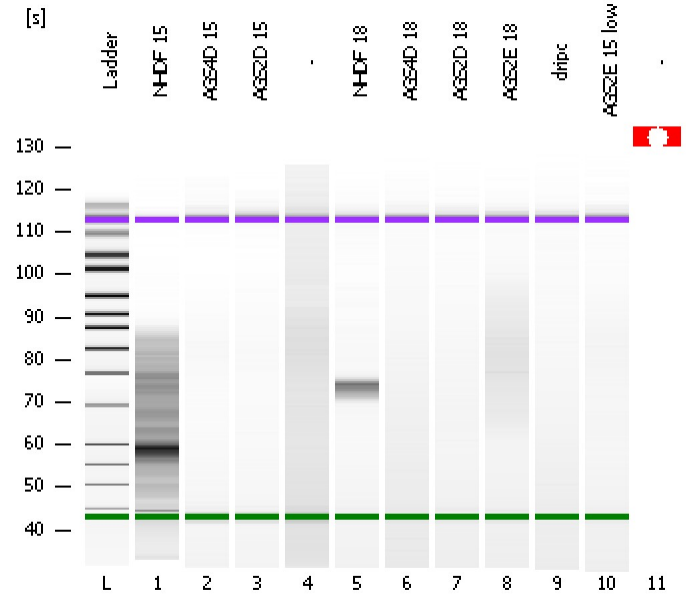
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electrophoresis File Run Summary



Instrument Information:

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

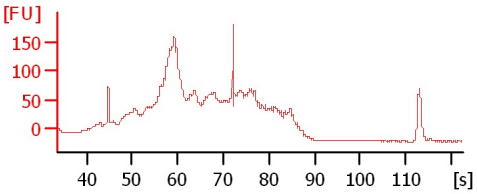
Assay Information:

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

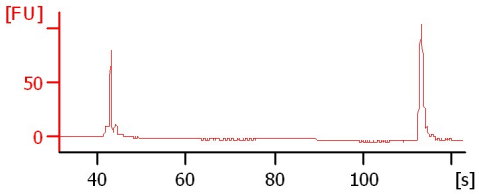
Chip Information:

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

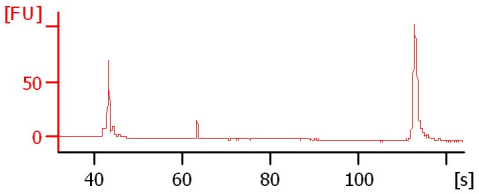
NHDF 15



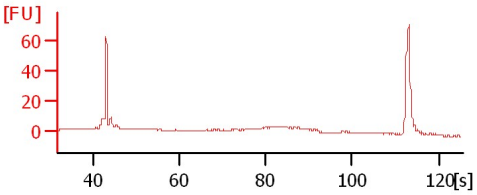
AGS4D 15



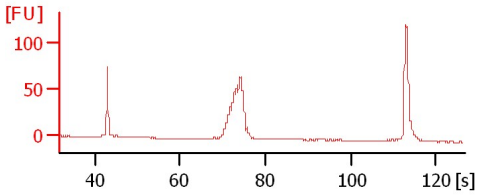
AGS2D 15



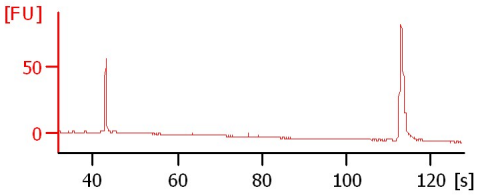
-



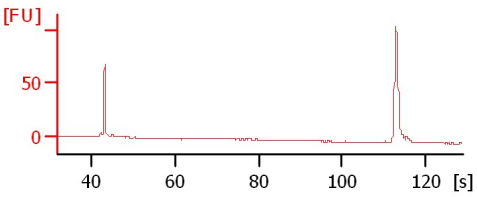
NHDF 18



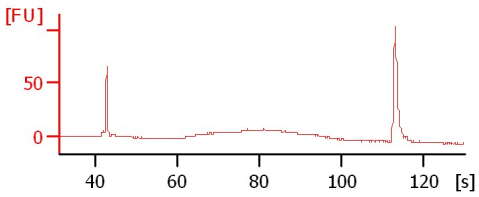
AGS4D 18



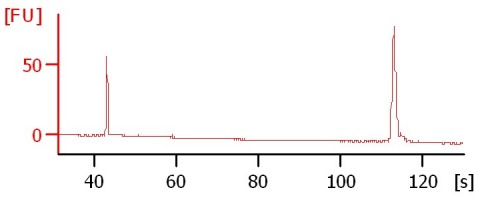
AGS2D 18



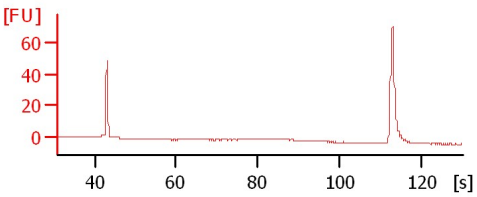
AGS2E 18



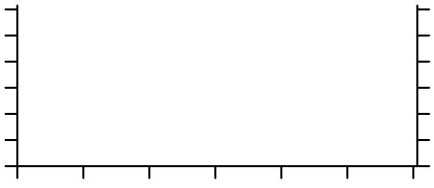
dripc



AGS2E 15 low



-



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NHDF 15		☐	✓			
AGS4D 15		☐	✓			
AGS2D 15		☐	✓			
-		☐	✓			
NHDF 18		☐	✓			
AGS4D 18		☐	✓			
AGS2D 18		☐	✓			
AGS2E 18		☐	✓			
dripc		☐	✓			
AGS2E 15 low		☐	✓			
-		☐	✗			
Ladder		☐	✓			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

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

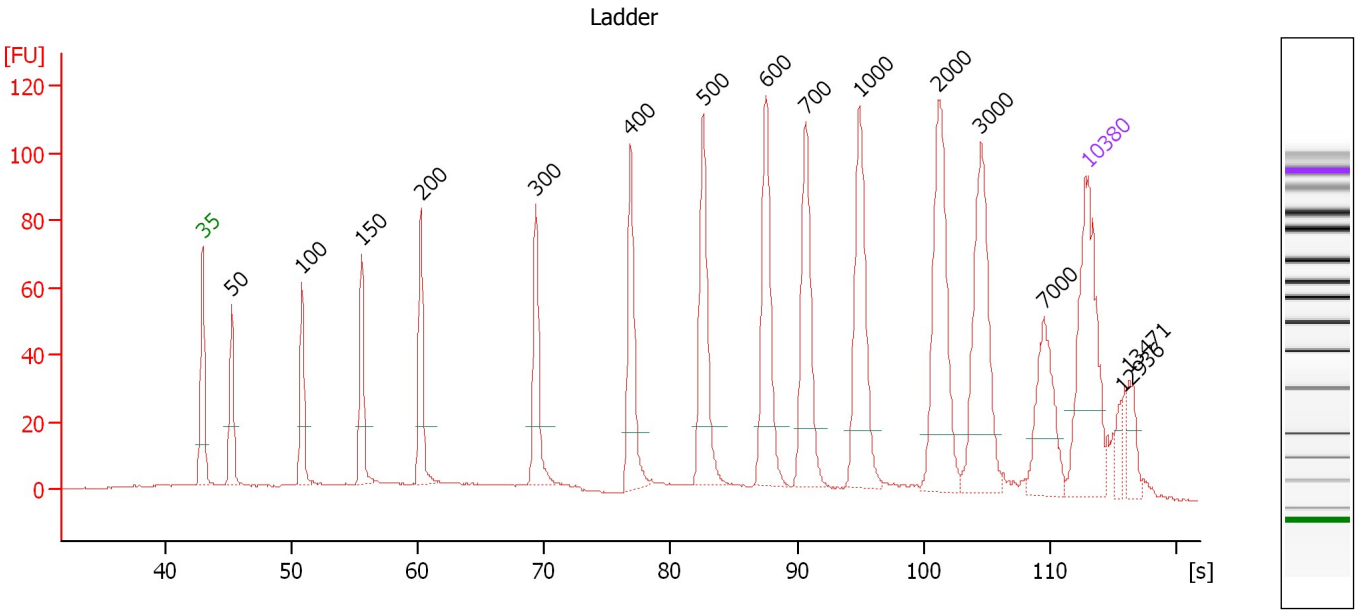
Ladder

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\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

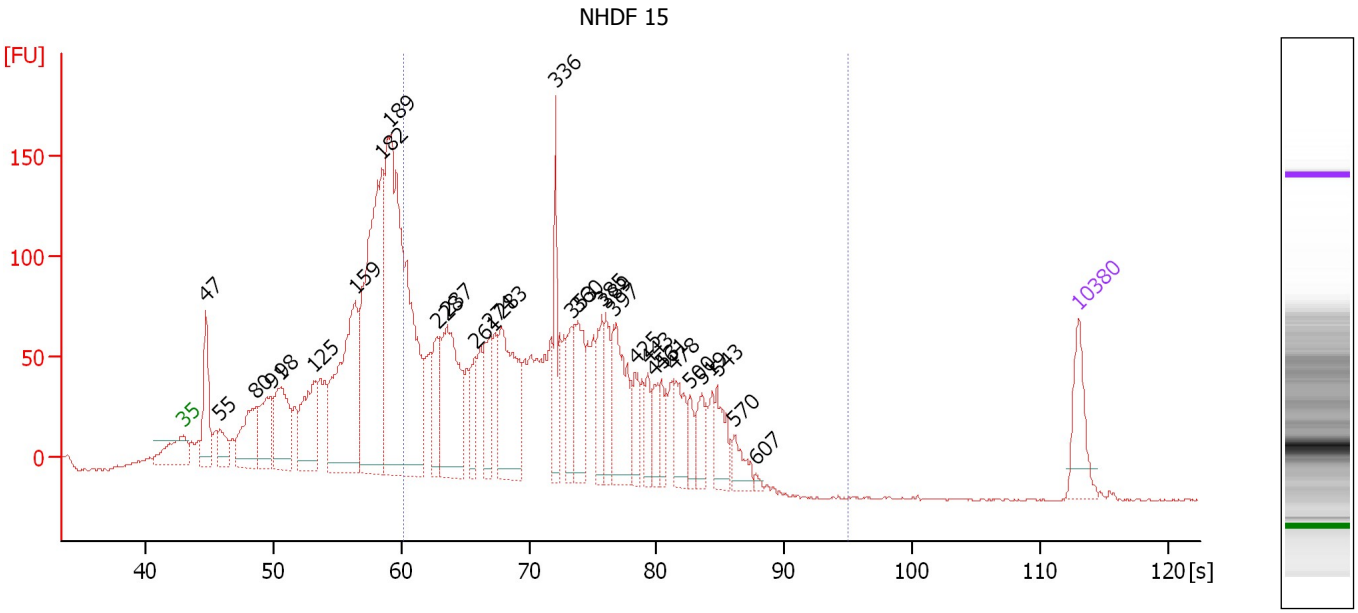
Peak table for Ladder

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
16		12,936	0.00	0.0	
17		13,471	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NHDF 15

Number of peaks found:	30	Corr. Area 1:	2,403.4
Noise:	0.5		

Peak table for sample 1 : NHDF 15

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	176.54	5,748.2	
3	55	70.25	1,933.5	
4	80	185.42	3,497.3	
5	91	151.38	2,523.5	
6	98	217.49	3,360.3	
7	125	214.68	2,595.5	
8	159	500.36	4,760.5	
9	182	726.82	6,060.0	
10	189	1,024.29	8,215.3	
11	228	133.13	883.9	
12	237	309.99	1,978.5	
13	261	76.20	442.6	
14	274	122.11	676.0	
15	283	274.81	1,469.4	
16	336	114.28	514.7	
17	353	86.27	370.0	
18	360	139.03	585.1	
19	385	99.19	390.6	
20	389	82.12	320.1	
21	397	172.40	657.8	
22	425	60.69	216.1	
23	443	46.66	159.6	
24	453	48.94	163.9	
25	461	47.98	157.6	
26	478	89.75	284.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...

... Peak table for sample 1 : NHDF 15

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	500	38.96	118.0	
28	519	52.74	154.0	
29	543	71.59	199.6	
30	570	45.98	122.1	
31	607	6.34	15.8	
32	10,380	75.00	10.9	Upper Marker

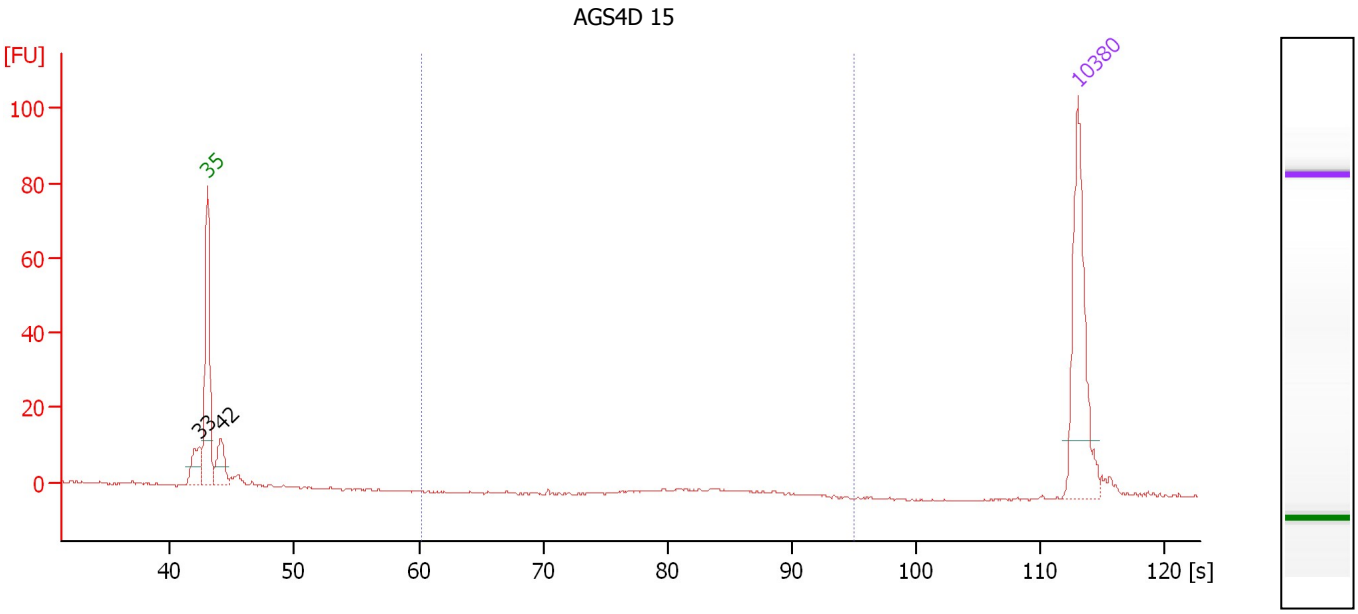
Region table for sample 1 : NHDF 15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	348	15,846.8	3,229.21	2,403.4	56	28.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : AGS4D 15

Number of peaks found:	2	Corr. Area 1:	0.4
Noise:	0.3		

Peak table for sample 2 : AGS4D 15

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	42	33.70	1,213.9	
4	10,380	75.00	10.9	Upper Marker

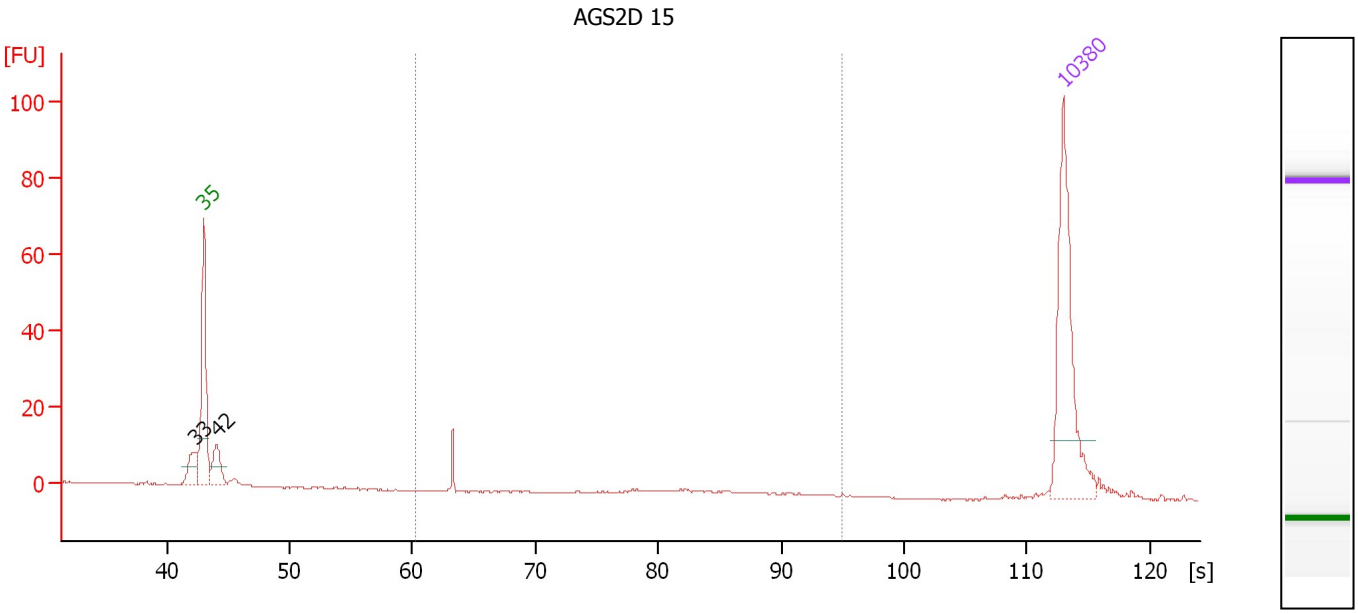
Region table for sample 2 : AGS4D 15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	510	1.2	0.39	0.4	1	5.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : AGS2D 15

Number of peaks found:	2	Corr. Area 1:	6.4
Noise:	0.2		

Peak table for sample 3 : AGS2D 15

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	42	26.56	961.1	
4	10,380	75.00	10.9	Upper Marker

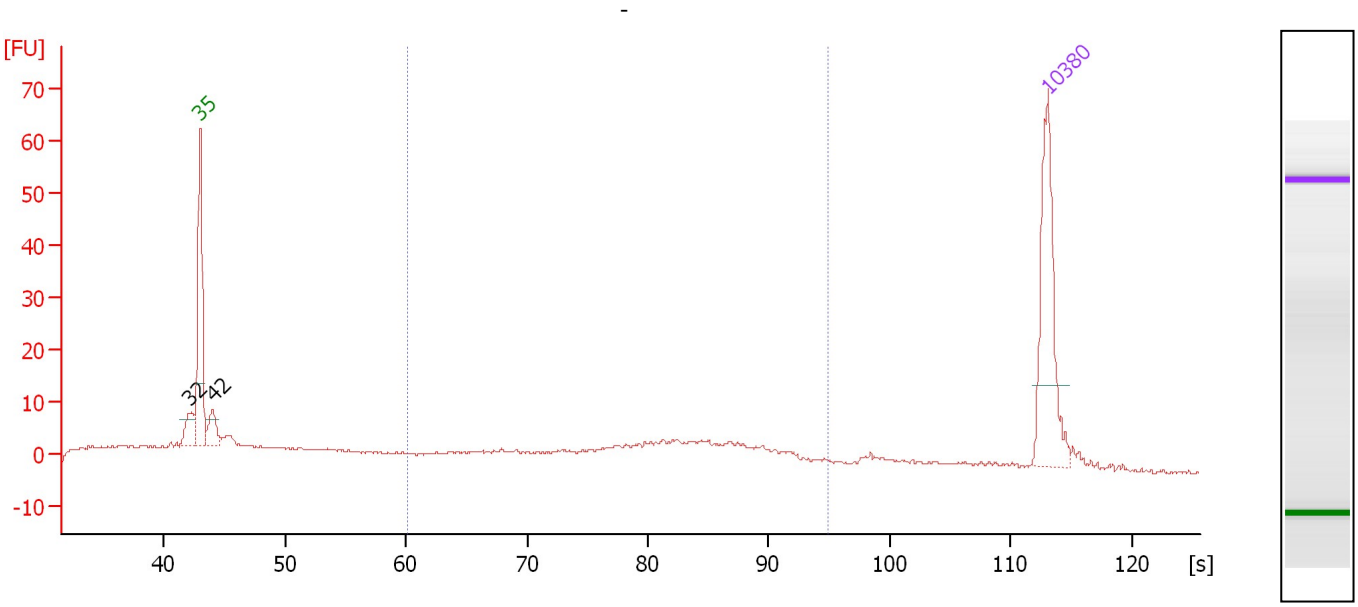
Region table for sample 3 : AGS2D 15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	304	38.9	6.63	6.4	12	39.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 :

Number of peaks found:	2	Corr. Area 1:	103.3
Noise:	0.2		

Peak table for sample 4 :

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	42	25.19	909.4	
4	10,380	75.00	10.9	Upper Marker

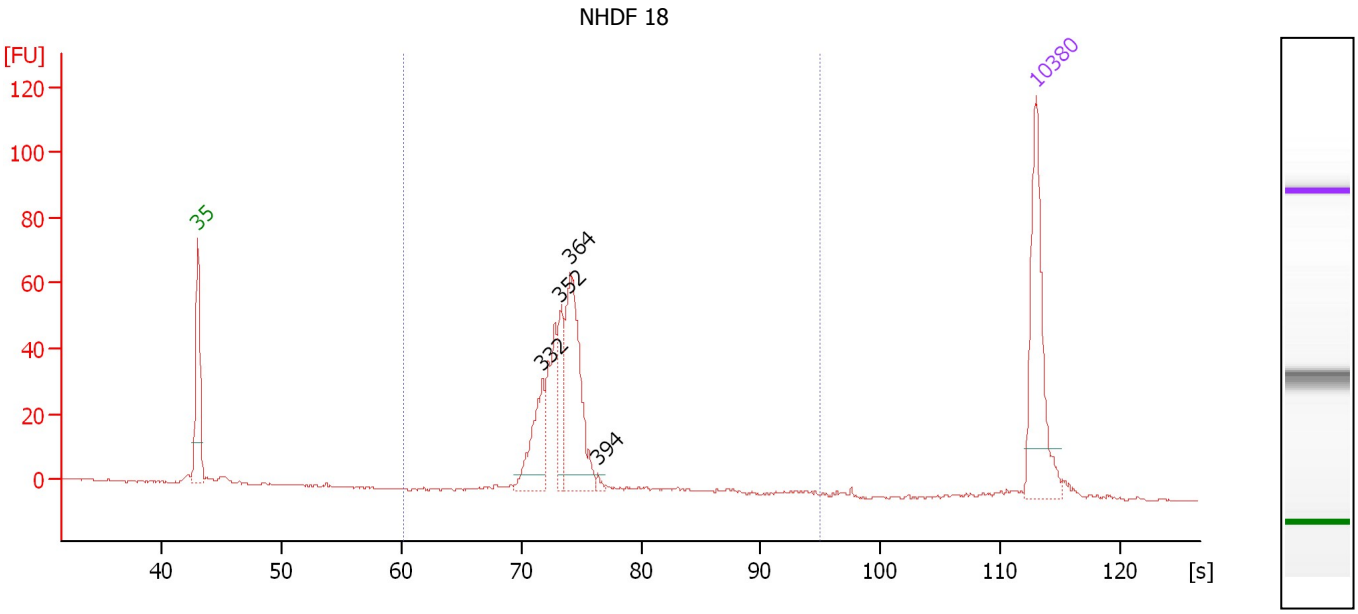
Region table for sample 4 :

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	493	511.0	140.45	103.3	46	32.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NHDF 18

Number of peaks found:	4	Corr. Area 1:	306.2
Noise:	0.2		

Peak table for sample 5 : NHDF 18

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		332	54.88	250.1	
3		352	39.27	168.9	
4		364	116.57	485.6	
5		394	3.03	11.7	
6	▶	10,380	75.00	10.9	Upper Marker

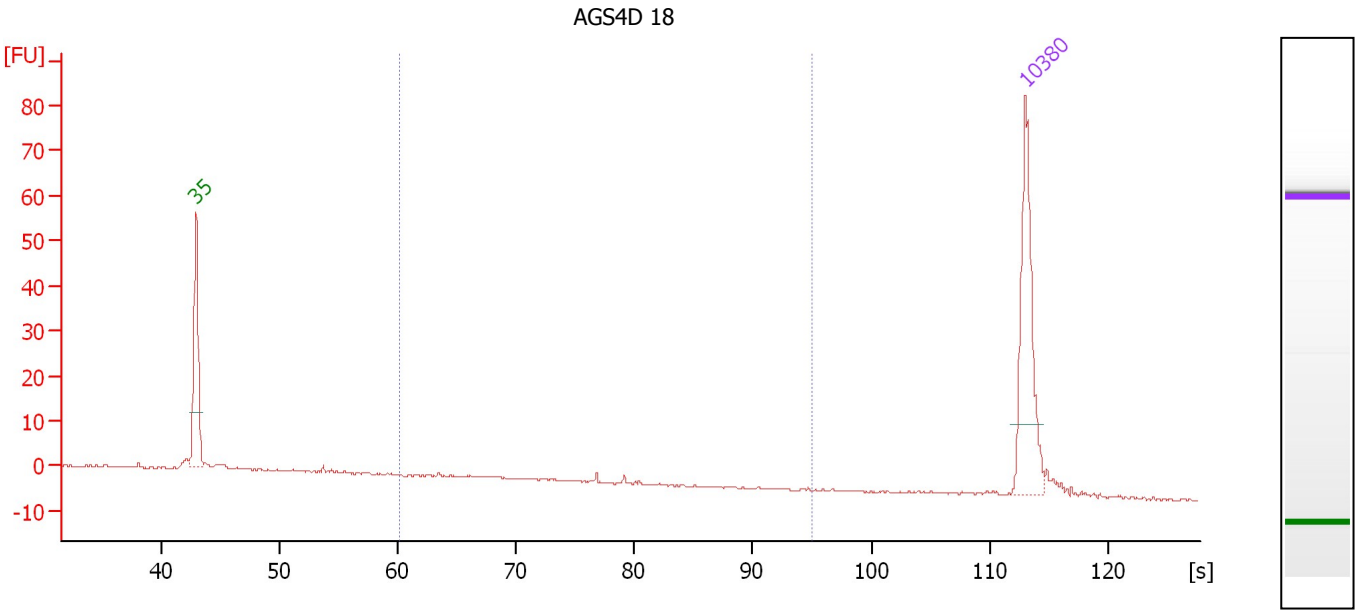
Region table for sample 5 : NHDF 18

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	360	1,161.1	272.65	306.2	92	14.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : AGS4D 18

Number of peaks found:	0	Corr. Area 1:	9.6
Noise:	0.2		

Peak table for sample 6 : AGS4D 18

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

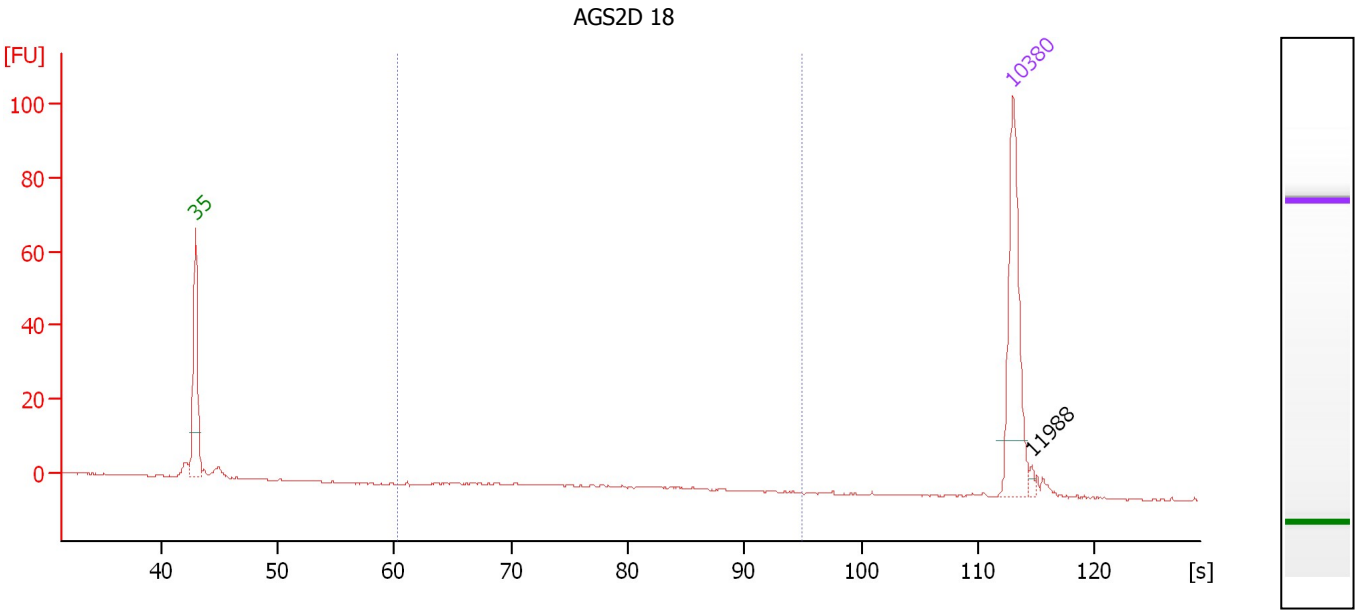
Region table for sample 6 : AGS4D 18

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	312	69.8	13.31	9.6	20	27.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : AGS2D 18

Number of peaks found:	1	Corr. Area 1:	2.1
Noise:	0.2		

Peak table for sample 7 : AGS2D 18

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	11,988	0.00	0.0	

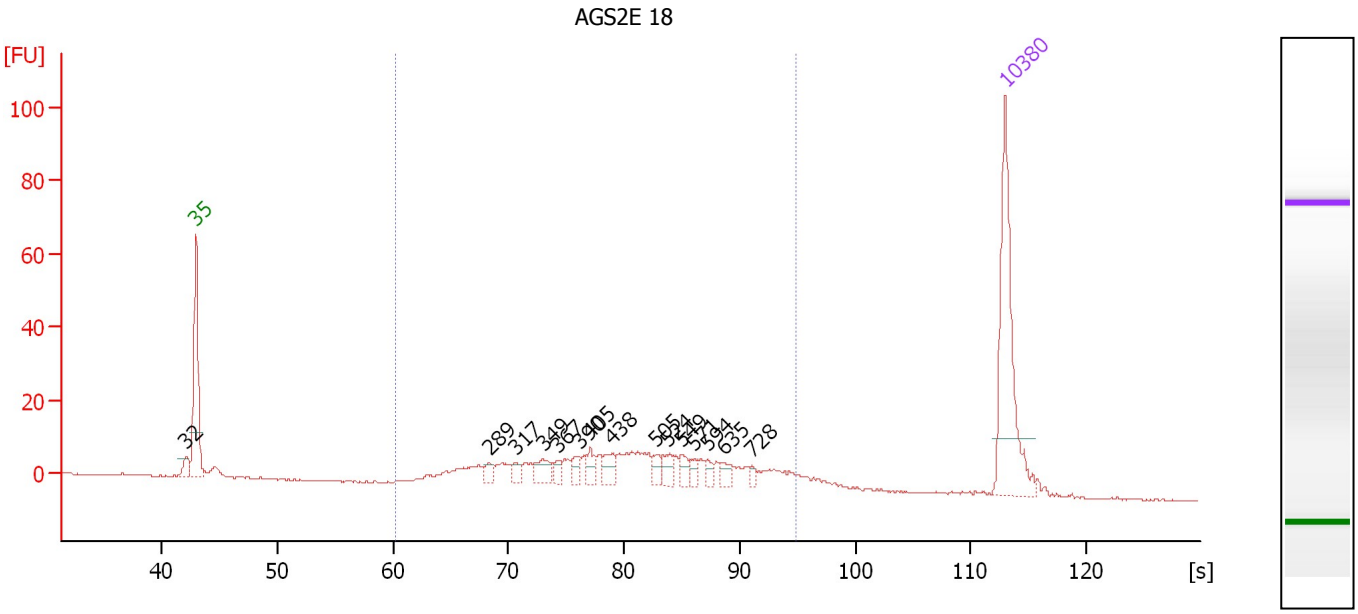
Region table for sample 7 : AGS2D 18

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	435	8.1	2.18	2.1	8	20.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : AGS2E 18

Number of peaks found:	15	Corr. Area 1:	274.7
Noise:	0.2		

Peak table for sample 8 : AGS2E 18

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	289	6.49	34.0	
4	317	6.02	28.8	
5	349	12.83	55.6	
6	367	5.06	20.9	
7	390	7.50	29.1	
8	405	8.92	33.4	
9	438	11.26	39.0	
10	505	8.02	24.1	
11	524	8.26	23.9	
12	549	7.28	20.1	
13	571	5.71	15.1	
14	594	4.83	12.3	
15	635	6.38	15.2	
16	728	3.45	7.2	
17	10,380	75.00	10.9	Upper Marker

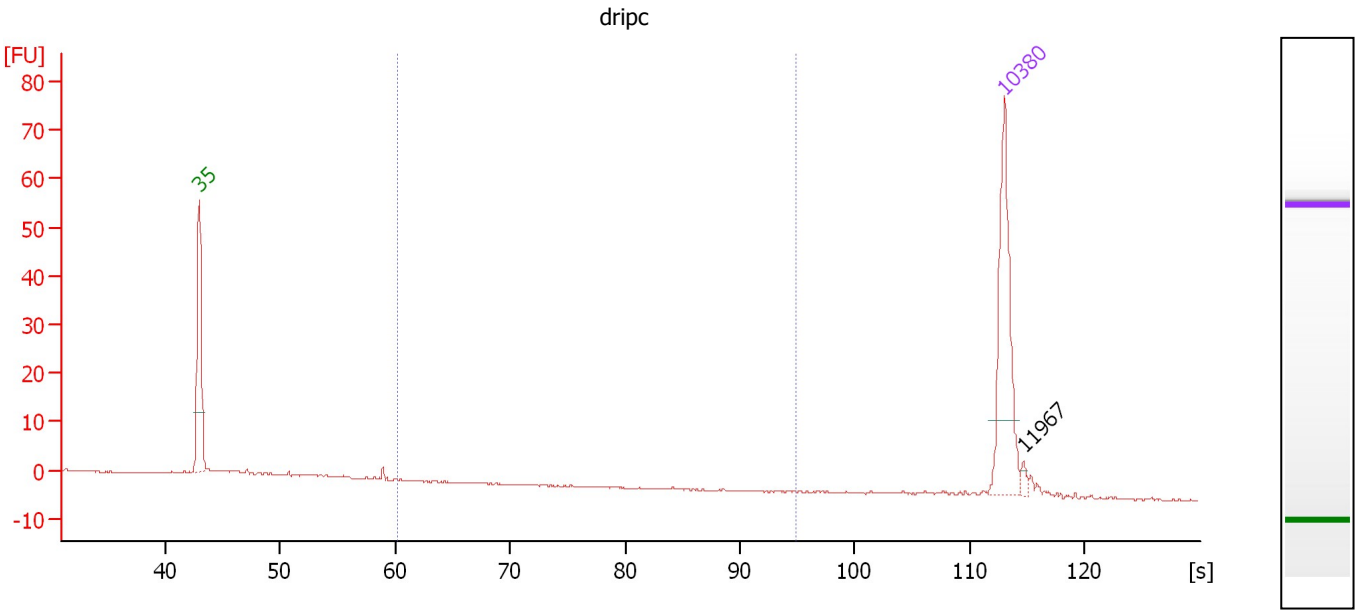
Region table for sample 8 : AGS2E 18

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	488	978.3	266.18	274.7	86	35.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : dripc

Number of peaks found:	1	Corr. Area 1:	0.0
Noise:	0.1		

Peak table for sample 9 : dripc

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	11,967	0.00	0.0	

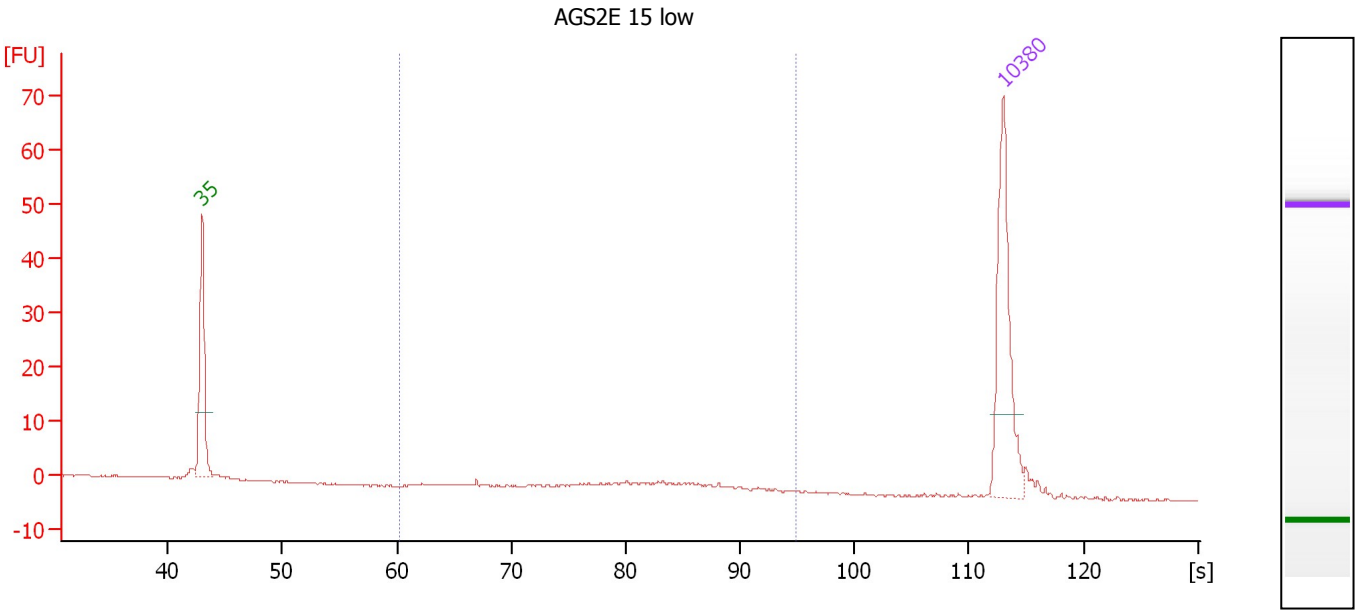
Region table for sample 9 : dripc

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	494	0.0	0.00	0.0	0	21.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : AGS2E 15 low

Number of peaks found:	0	Corr. Area 1:	16.5
Noise:	0.1		

Peak table for sample 10 : AGS2E 15 low

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 10 : AGS2E 15 low

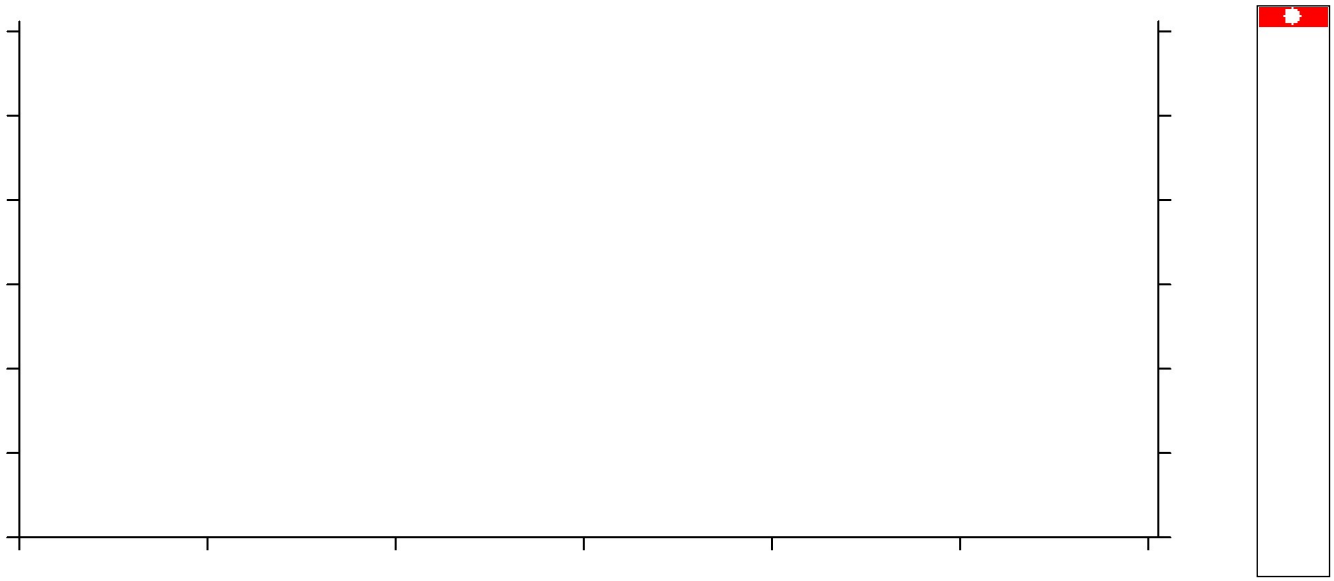
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	534	64.7	21.39	16.5	58	22.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Electropherogram Summary Continued ...

-



Setpoint Deviations for sample 11 : -

End Analysis Time Range [s] : 17.15

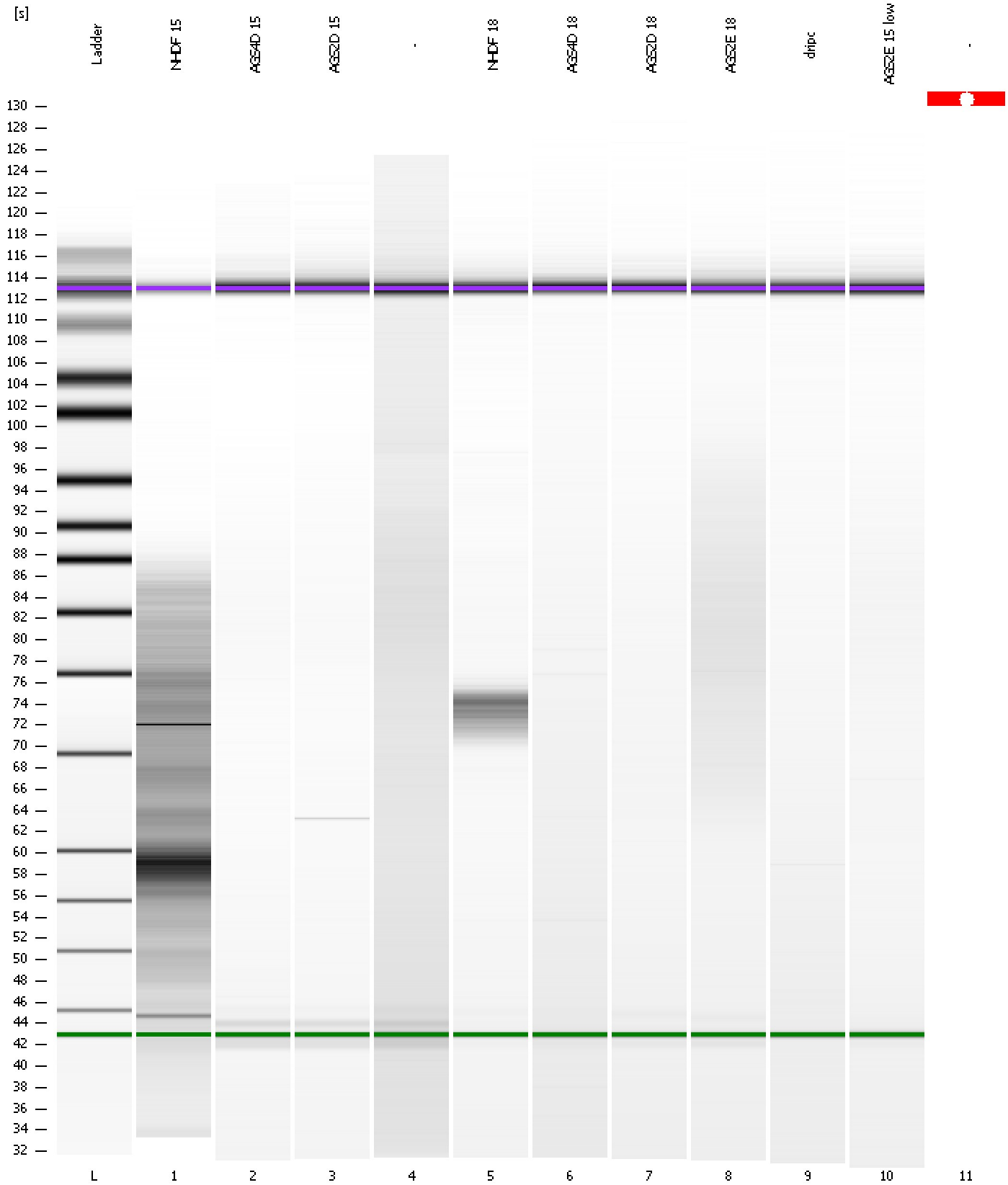
Overall Results for sample 11 : -

Noise: 0.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad

Created: 4/25/2013 10:18:11 AM
Modified: 4/25/2013 10:57:15 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run aborted on port 1		Instrument	Run		4/25/2013 10:57:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-04-25\2013-04-25_002.xad)		Instrument	Run		4/25/2013 10:18:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/25/2013 10:18:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/25/2013 10:18:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/25/2013 10:18:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/25/2013 10:18:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/25/2013 10:18:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/25/2013 10:18:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1