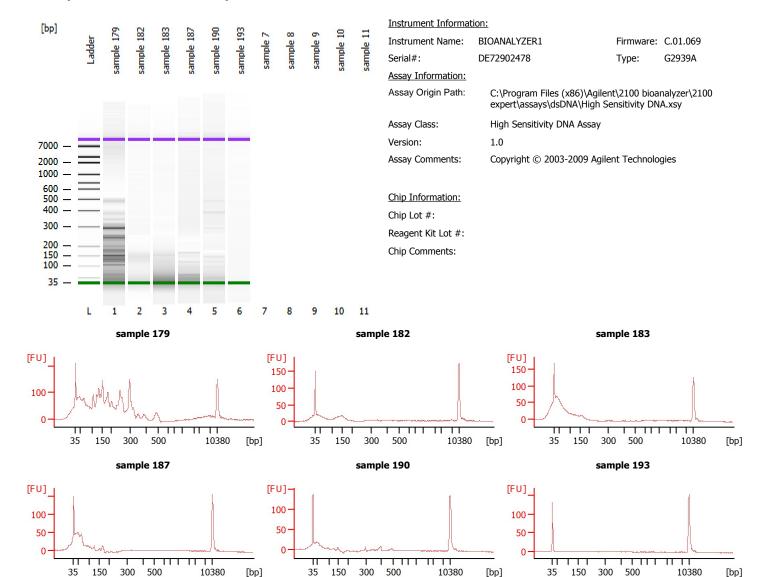
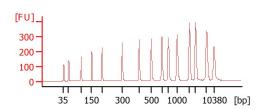
Assay Class: High Sensitivity DNA Assay Created: 10/16/2019 2:51:05 PM Data Path: C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Created: 10/16/2019 3:18:14 PM

Electrophoresis File Run Summary





Ladder

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Printed: 10/16/2019 3:29:42 PM

High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad 10/16/2019 2:51:05 PM 10/16/2019 3:18:14 PM Assay Class: Created: Data Path: Modified: **Electrophoresis File Run Summary (Chip Summary) Sample Name Sample Comment** Rest. Digest Status Observation **Result Label** Res ult Col or sample 179 sample 182 sample 183 sample 187 sample 190 sample 193 sample 7 sample 8 sample 9 sample 10 sample 11 Chip Lot # Reagent Kit Lot #

Chip Comments:

Page 3 of 14

Printed: 10/16/2019 3:29:42 PM

Assay Class: High Sensitivity DNA Assay Created: 10/16/2019 2:51:05 PM Data Path: C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Created: 10/16/2019 3:18:14 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

e..... 2 a.a / ...g...ea to 2011e. a...a ep

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

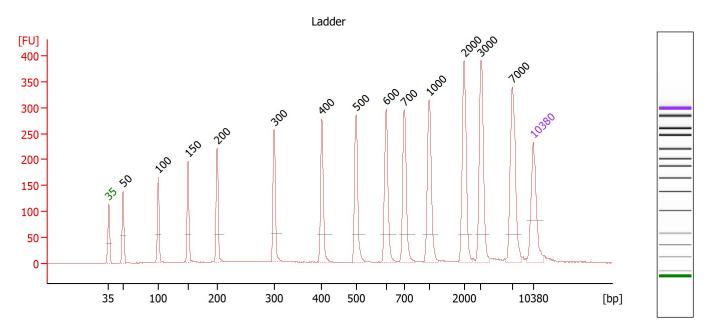
Filter Width [s]: 0.5 Polynomial Order: 4

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 C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Modified:

Electropherogram Summary



Overall Results for Ladder

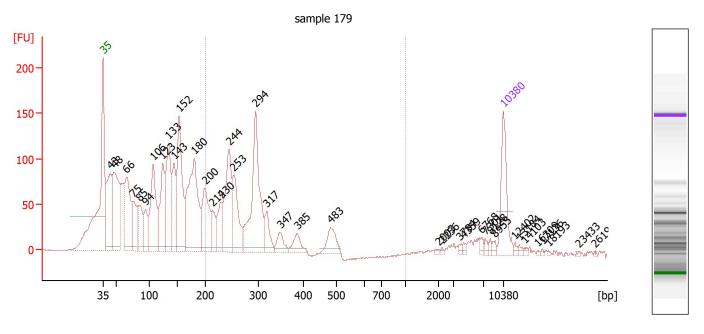
Noise: 0.2

Peak	ta	hle	for	Lad	lder
rear	. La	שועו	101	Lau	uei

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	4	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 C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Modified:

Electropherogram Summary Continued ...



Overall Results for sample 1 : <u>sample 179</u>

Number of peaks found: 38 Corr. Area 1: 1,168.6

Noise: 0.3

Peak table	for sample 1:	<u>sample 179</u>		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	211.33	7,403.6	
3	48	271.25	8,621.9	
4	66	207.74	4,790.6	
5	75	101.15	2,034.2	
6	85	88.27	1,573.7	
7	94	70.48	1,138.2	
8	106	211.77	3,014.2	
9	123	156.68	1,922.3	
10	133	212.26	2,410.2	
11	143	115.68	1,222.4	
12	152	252.66	2,511.2	
13	180	311.92	2,623.0	
14	200	144.19	1,094.4	
15	214	48.54	344.5	
16	230	64.41	424.5	
17	244	184.31	1,143.4	
18	253	120.66	722.2	
19	294	267.98	1,382.0	
20	317	46.62	222.5	
21	347	30.51	133.2	
22	385	30.63	120.5	
23	483	41.42	129.8	
24	2,003	2.11	1.6	
25	2,256	2.04	1.4	
26	3,784	3.81	1.5	

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Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Created: 10/16/2019 2:51:05 PM Modified: 10/16/2019 3:18:14 PM

Electropherogram Summary Continued ...

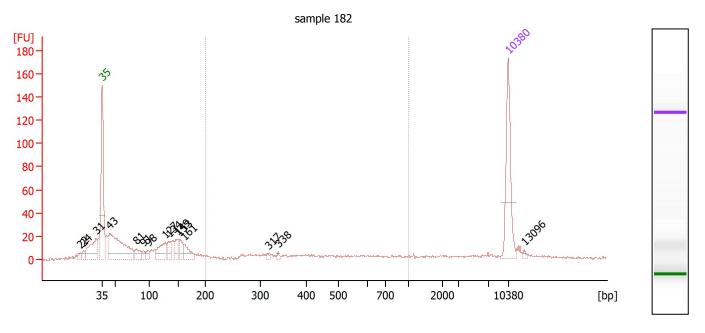
Peak ta	ble for sample 1	: <u>sample 179</u>		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/I]	Observations
27	4,359	4.52	1.6	
28	6,768	6.08	1.4	
29	7,301	4.81	1.0	
30	8,128	4.14	0.8	
31	8,955	5.33	0.9	
32	10,380	75.00	10.9	Upper Marker
33	12,402	0.00	0.0	
34	13,184	0.00	0.0	
35	14,103	0.00	0.0	
36	16,309	0.00	0.0	
37	17,136	0.00	0.0	
38	18,193	0.00	0.0	
39	23,433	0.00	0.0	
40	26,190	0.00	0.0	

Region	table for	sample 1	:	<u>sample 179</u>
--------	-----------	----------	---	-------------------

From	To [bp] Corr.	% of		Size distribution in		Molarity	Co
[bp]		Area	Total	[bp]	CV [%]	[pg/µl]	[pmol/l]	lor
200	1,000	1,168.6	31	282	23.3	884.06	4,974.5	

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Created: 10/16/2019 2:51:05 PM Modified: 10/16/2019 3:18:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : <u>sample 182</u>

Number of peaks found: 15 Corr. Area 1: 117.5

Noise: 0.6

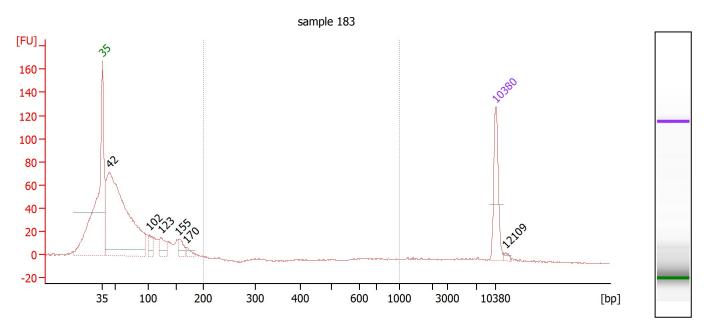
Peak ta	ble	for sample 2:	<u>sample 182</u>		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1		22	0.00	0.0	
2		24	0.00	0.0	
3		31	0.00	0.0	
4	◀	35	125.00	5,411.3	Lower Marker
5		43	179.60	6,268.0	
6		81	22.42	421.5	
7		91	9.99	166.6	
8		98	11.81	183.3	
9		127	47.38	563.2	
10		134	20.69	234.0	
11		149	24.07	244.9	
12		153	19.80	195.8	
13		161	28.01	263.8	
14		317	3.04	14.6	
15		338	3.04	13.6	
16		10,380	75.00	10.9	Upper Marker
17		13,096	0.00	0.0	

Pagion	table	for samp	٠ 2 ما	sample 182
Region	table	TOF Samp	nez:	samble 182

From	To [bp] Corr.	% of		Size distribution in		Molarity	Co
[bp]		Area	Total	[bp]	CV [%]	[pg/µl]	[pmol/l]	lor
200	1,000	117.5	16	436	40.4	92.81	393.2	

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Modified:

Electropherogram Summary Continued ...



Overall Results for sample 3: sample 183

Number of peaks found: 6 Corr. Area 1: 8.7

Noise: 0.4

Peak t	able	tor sample 3:	<u>sample 183</u>		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	4	35	125.00	5,411.3	Lower Marker
2		42	1,045.04	37,265.2	
3		102	39.01	578.3	
4		123	56.33	694.5	
5		155	37.26	363.5	
6		170	18.16	162.2	
7		10,380	75.00	10.9	Upper Marker
8		12,109	0.00	0.0	

Region table for sample 3: sample 183

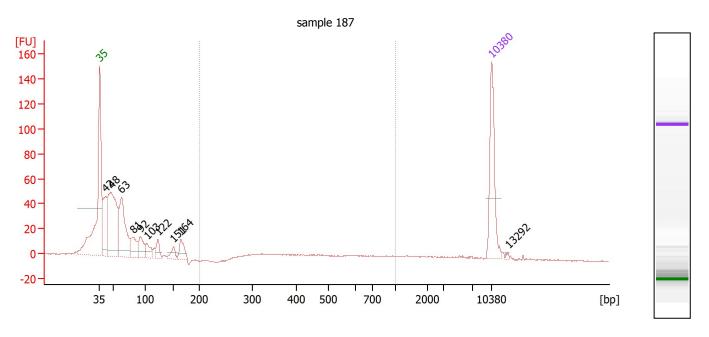
From [bp]	To [bp] Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Co lor
200	1,000	8.7	1	718	22.6	7.37	18.5	

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Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Modified:

Electropherogram Summary Continued ...



Overall Results for sample 4: <u>sample 187</u>

Number of peaks found: 10 Corr. Area 1: 54.3

Noise: 0.4

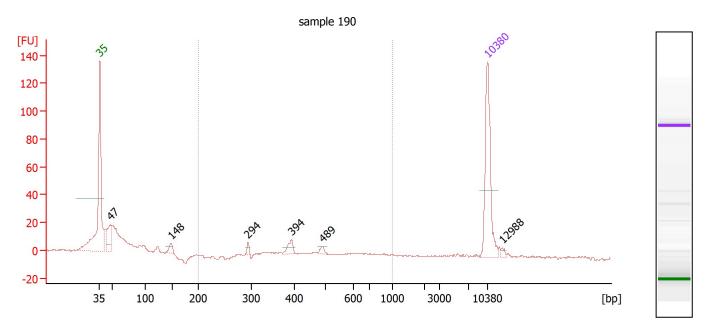
Peak table for sample 4:			for sample 4:	<u>sample 187</u>		
	Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
	1	4	35	125.00	5,411.3	Lower Marker
	2		42	111.99	4,076.5	
	3		48	239.98	7,631.9	
	4		63	155.04	3,716.7	
	5		81	46.20	865.8	
	6		92	40.03	659.7	
	7		103	26.74	394.9	
	8		122	21.52	266.4	
	9		151	16.88	168.9	
	10		164	29.70	273.7	
	11		10,380	75.00	10.9	Upper Marker
	12		13,292	0.00	0.0	

Region table for sample 4: <u>sample 187</u>

From [bp]	To [bp] Co		•	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Co lor
200	1.000 54.	3 8	506	34.8	41.32	143.1	

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Modified:

Electropherogram Summary Continued ...



Overall Results for sample 5 : <u>sample 190</u>

Number of peaks found: 6 Corr. Area 1: 46.6

Noise: 0.4

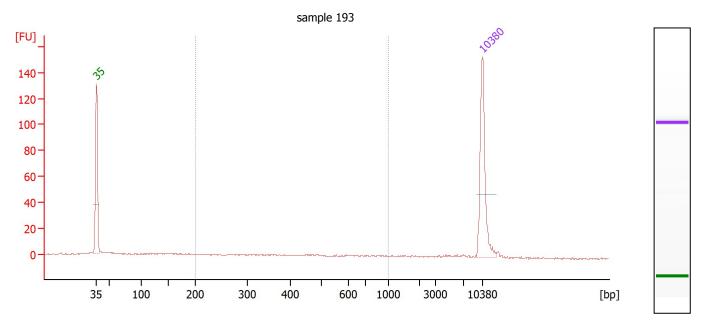
Peak table for sample 5:			for sample 5:	<u>sample 190</u>		
	Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
	1	◀	35	125.00	5,411.3	Lower Marker
	2		47	43.43	1,395.6	
	3		148	9.72	99.5	
	4		294	4.92	25.4	
	5		394	11.24	43.2	
	6		489	4.30	13.3	
	7		10,380	75.00	10.9	Upper Marker
	8		12,988	0.00	0.0	

Region table for sample 5: sample 190

From [bp]	To [bp] Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]		Molarity [pmol/l]	Co lor
200	1,000	46.6	18	477	31.8	34.60	123.3	

Assay Class: High Sensitivity DNA Assay Created: 10/16/2019 2:51:05 PM Data Path: C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Created: 10/16/2019 3:18:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : <u>sample 193</u>

Number of peaks found: 0 Corr. Area 1: 46.3

Noise: 0.3

Peak table for sample 6 : <u>sample 193</u>

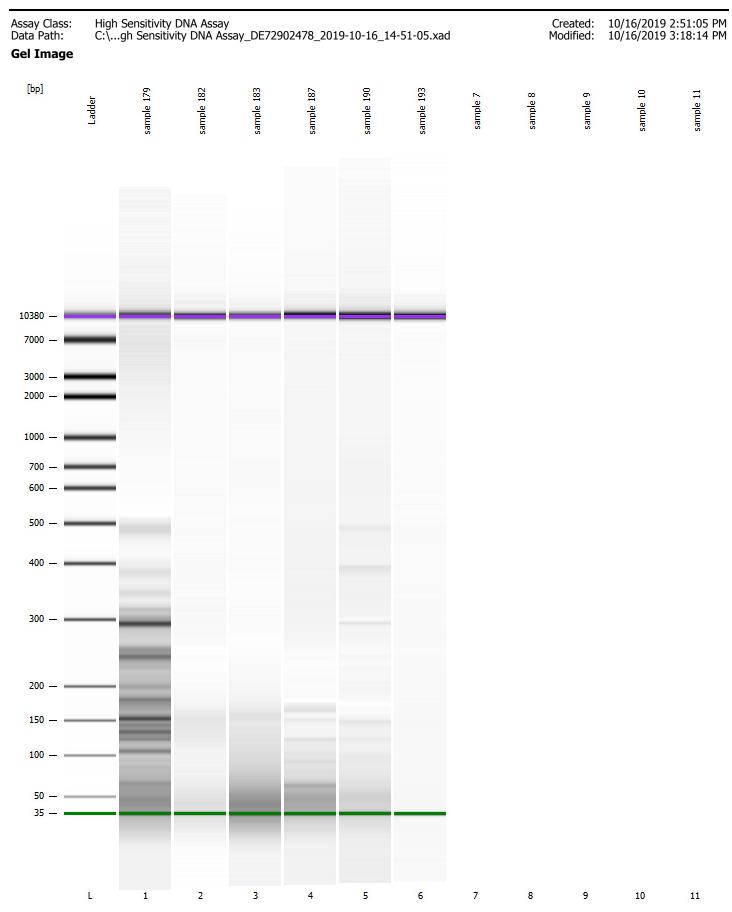
 Peak
 Size [bp]
 Conc. [pg/μl]
 Molarity [pmol/l]
 Observations

 1
 ◀
 35
 125.00
 5,411.3
 Lower Marker

 2
 ▶
 10,380
 75.00
 10.9
 Upper Marker

Region table for sample 6: sample 193

From To [bp] Corr. % of **Average Size** Size distribution in Conc. Molarity Co **Total** [bp] Area [bp] CV [%] [pg/µl] [pmol/l] lor 200 35 42.7 150.8 1,000 46.3 455 35.61



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Assay Class:

High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Data Path: Modified:

Created:

10/16/2019 2:51:05 PM 10/16/2019 3:18:14 PM

Printed: 10/16/2019 3:29:42 PM

Invalid Samples

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay C:\...gh Sensitivity DNA Assay_DE72902478_2019-10-16_14-51-05.xad Created: 10/16/2019 2:51:05 PM Modified: 10/16/2019 3:18:14 PM

Run Logbook

Description N Run ended on port 7 (Number of wells acquired: 7)	Number	Source Instrument	Category Run	Sub Category	Time Stamp 10/16/2019 3:18:07 PM	Time Zone (GMT04:00) Eastern Standard Time	User BioAnalyzer	Host BioAnalyzer-PC
Run started on port 7 (File: C:\Users\BioAna lyzer\BioAnalyze r Data\Dunn Lab\2019-10-16 \2100 expert_High Sensitivity DNA Assay_DE72902 478_2019-10-16 _14-51-05.xad)		Instrument	Run		10/16/2019 2:51:10 PM	(GMT04:00) Eastern Standard Time	BioAnalyzer	BioAnalyzer-PC
Product Number : G2939A		Instrument	Run		10/16/2019 2:51:10 PM	(GMT04:00) Eastern Standard Time	BioAnalyzer	BioAnalyzer-PC
Name : BIOANALYZER1		Instrument	Run		10/16/2019 2:51:10 PM	(GMT04:00) Eastern Standard Time	BioAnalyzer	BioAnalyzer-PC
Vendor : Agilent Technologies		Instrument	Run		10/16/2019 2:51:10 PM	(GMT04:00) Eastern Standard Time	BioAnalyzer	BioAnalyzer-PC
Serial# : DE72902478		Instrument	Run		10/16/2019 2:51:10 PM	(GMT04:00) Eastern Standard Time	BioAnalyzer	BioAnalyzer-PC
Firmware : C.01.069		Instrument	Run		10/16/2019 2:51:10 PM	(GMT04:00) Eastern Standard Time	BioAnalyzer	BioAnalyzer-PC
Cartridge : Electrode		Instrument	Run		10/16/2019 2:51:10 PM	(GMT04:00) Eastern Standard Time	BioAnalyzer	BioAnalyzer-PC