bx532 dPCR Report

This report for experiment bx532 includes experiment data, setup data for imaging before, during, and/or after the run, errors/warnings regarding the run, the expected protocol and estimated thermocycling metrology. The report also includes any stitched images before and/or after the run. It does not include postprocessing of the images, but this report can be augmented with postprocessing data after the fact. Initial conditions for the run can be found to trace any unexpected behavior after thermocycling. This report does not include the actual thermal profile experienced by the system but is estimated based on the materials at the heater cartridge interface.

Experiment Data

Experiment data includes all information regarding the experimental setup on the instrument. This includes the experiment name, the instrument's configuration, dPCR cartridge information, as well as any excess materials used in the run.

Property	Value
Experiment Name	bx532
Protocol	Sample MW dPCR Protocol
Start Time (HH:mm:ss)	01:17:08
Start Date (MM/dd/YYYY)	12/22/2023
Projected End Time (HH:mm:ss)	04:14:08
Projected End Date (MM/dd/YYYY)	12/22/2023
Heater	A
Partition Type	Microwells
Cartridge	M2M
Cartridge Length (mm)	8.1
Cartridge Width (mm)	6
Cartridge Height (mm)	2.2
Clamp Position (s)	350000
Tray Position (s)	790000
Glass Offset (mm)	12.3
Elastomer	FFBE 3Di2bV1.0M NPF

Property	Value
Elastomer Thickness (mm)	1
Bergquist	SoftFlex (E038)
Bergquist Thickness (mm)	2
Contact Surface Area (mm x mm)	0
Pressure (KPa)	0

Cartridge Layout

Cartridge layout summarizes information regarding the sample and assay loading in the cartridge. This includes the names for each sample loaded as well as for each assay loaded. An empty cell is an indication of a sample or assay section that was not loaded for this run.

Imaging Setup

Imaging setup includes all information regarding the imaging performed before, during, and after the run.

Property	Value
X0 (S)	10578
Y0 (S)	1215000
Z0 (S)	325000
FOV dX (S)	37000
dY (S)	22300
Rotational Offset (°)	6
Use Autofocus	Yes
Image Before	Yes
Image During (FOV)	No
Image During Frequency (FOV)	NA
Image During (Assay)	No
Image During Frequency (Assay)	NA
Image During (Sample)	Yes
Image During Frequency (Sample)	1 minute
Image After	Yes
S3 Bucket Path	/home/ir/
Local Path	NA
Image in Cy5	No

Property	Value
Image in FAM	Yes
Image in HEX	Yes
Image in Atto	Yes
Image in Alexa	Yes
Image in Cy5.5	Yes
Cy5 Intensity (%)	20
FAM Intensity (%)	20
HEX Intensity (%)	20
Atto Intensity (%)	20
Alexa Intensity (%)	20
Cy5.5 Intensity (%)	20
Cy5 Exposure (ms)	300000
FAM Exposure (ms)	600000
HEX Exposure (ms)	500000
Atto Exposure (ms)	NA
Alexa Exposure (ms)	NA
Cy5.5 Exposure (ms)	NA

Initial Conditions and Constants

These are the initial conditions determined at the onset of the run, covering a range of values that implicitly or explicitly affect the run's outcome. The initial conditions include information pertaining to the TECs initial object and sink temperature which could potentially affect ramp rates for the entire run. Other initial conditions are as influential, but may slightly extend the projected run time, such as error states on the TEC which require a reset.

Versions

Versions include all version pertaining to the Firmware loaded on each submodule and module board (including the Firmware loaded on the TEC boards). Software versions are also included, these are version numbers for the Image Analysis Model used in post-processing, the version of the Autofocus model, GUI, Backend, and API.