Martyn and Design Team,

I have recorded several Picoscope waveforms at the requested 500Sec per division, 5MS, 14bits and 1 buffer. I did get a sample interval of 1ms and 1000 S/sec. Each buffer is 1hr23min long and the file size is a little over 17MB each. Of course your forum website will not allow me to upload this size of file. (design team needs to be made aware of this limitation) I did get a partial that is at the end of the Picolog capture of section 7 (see next page) but is only 40 minutes long and 8MB file size that I will upload if possible.

The total Picolog is a little over 9 hours long and I have divided it to correlate with the Picoscope 6 waveforms taken at the same time the Picolog (200ms sample interval—all 4 channels) was being recorded. This ensures that there will be no mistake when the noise in the Picolog comes and goes ..."The Pattern". I have adjusted the scaling to 20X on all the captures except section 4 capture I did screenshots of 20X, 1X, 2X, and 10X because section 4 has half noise and half "quiet" in the same capture. The 20X scaling simulates how picolog graphs (magnifies) a trace when the voltage does not change very much. You can also compare the Picoscope section 4 captures (20X, 1X, 2X, 10X) and see that without the 20X setting you cannot see the (red and blue traces) temperature voltage change hardly at all.

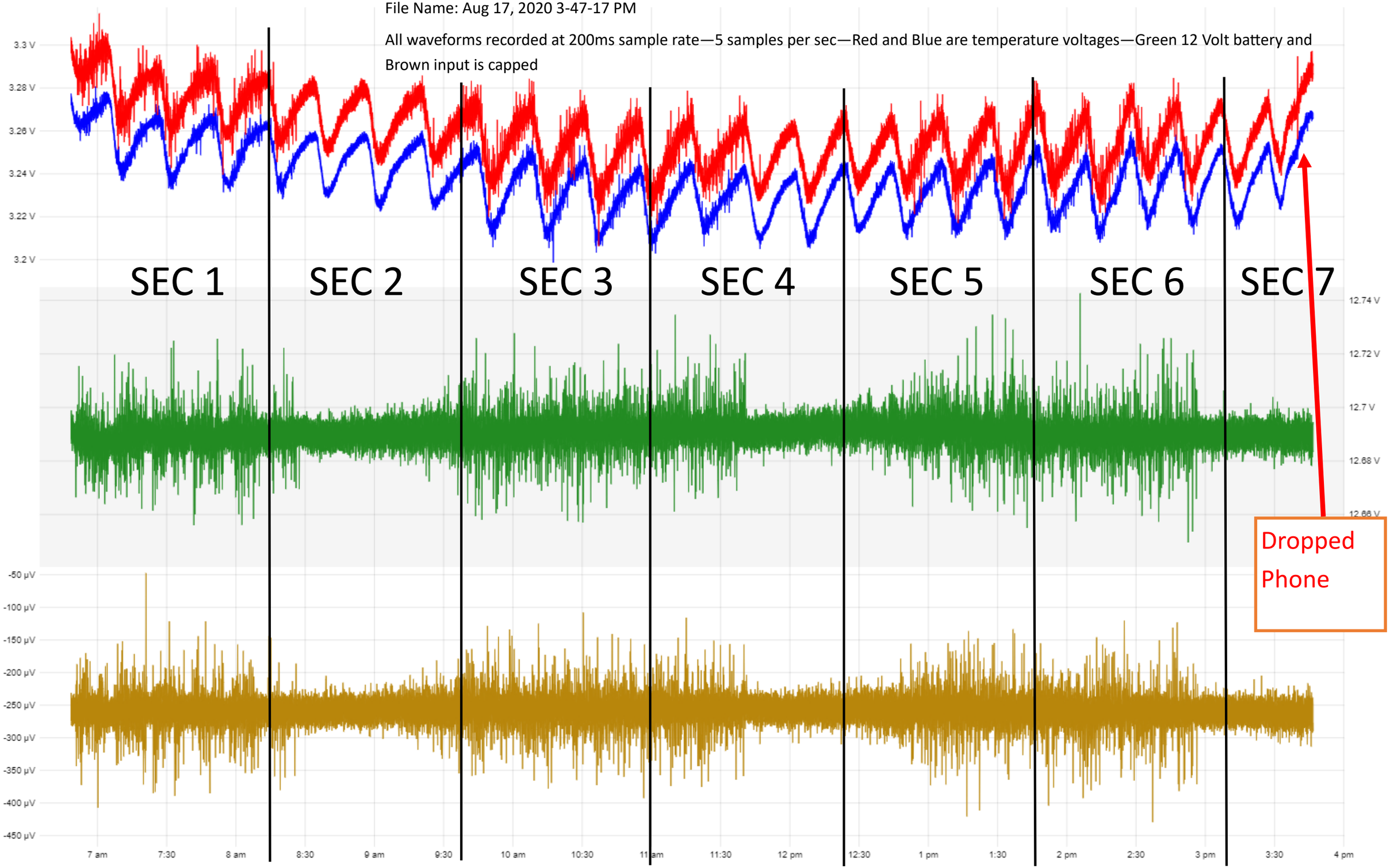
When you look at all the Picoscope 6 waveforms you can see there is no pattern in the Picoscope captures only in the Picolog…. Somethings wrong with Picolog. An interesting discovery… Look at the last 3 pages (12, 13, and 14) and you will see the partial capture of section 7 (which as stated above I will try to upload). I accidentally dropped my phone on the scope probe going to the red trace (temp voltage and caused a 1 second series of spikes 2.9 volts Peak to peak. You can see when this event happened in Picolog (which I indicate on the next page). Picolog shows a 37mv spike Peak to Peak for the Picoscope 2.9 volt series of spikes. This tells me that the 15mv –20 mv spikes I see in the noisy section of "The Pattern" I should see 1 volt to 2 volts of noise or spikes in the two temp sensor voltage waveforms...which can be seen is not there… Again a Picolog problem… Is there a way to correct this or filter it out….

Thanks DJETH

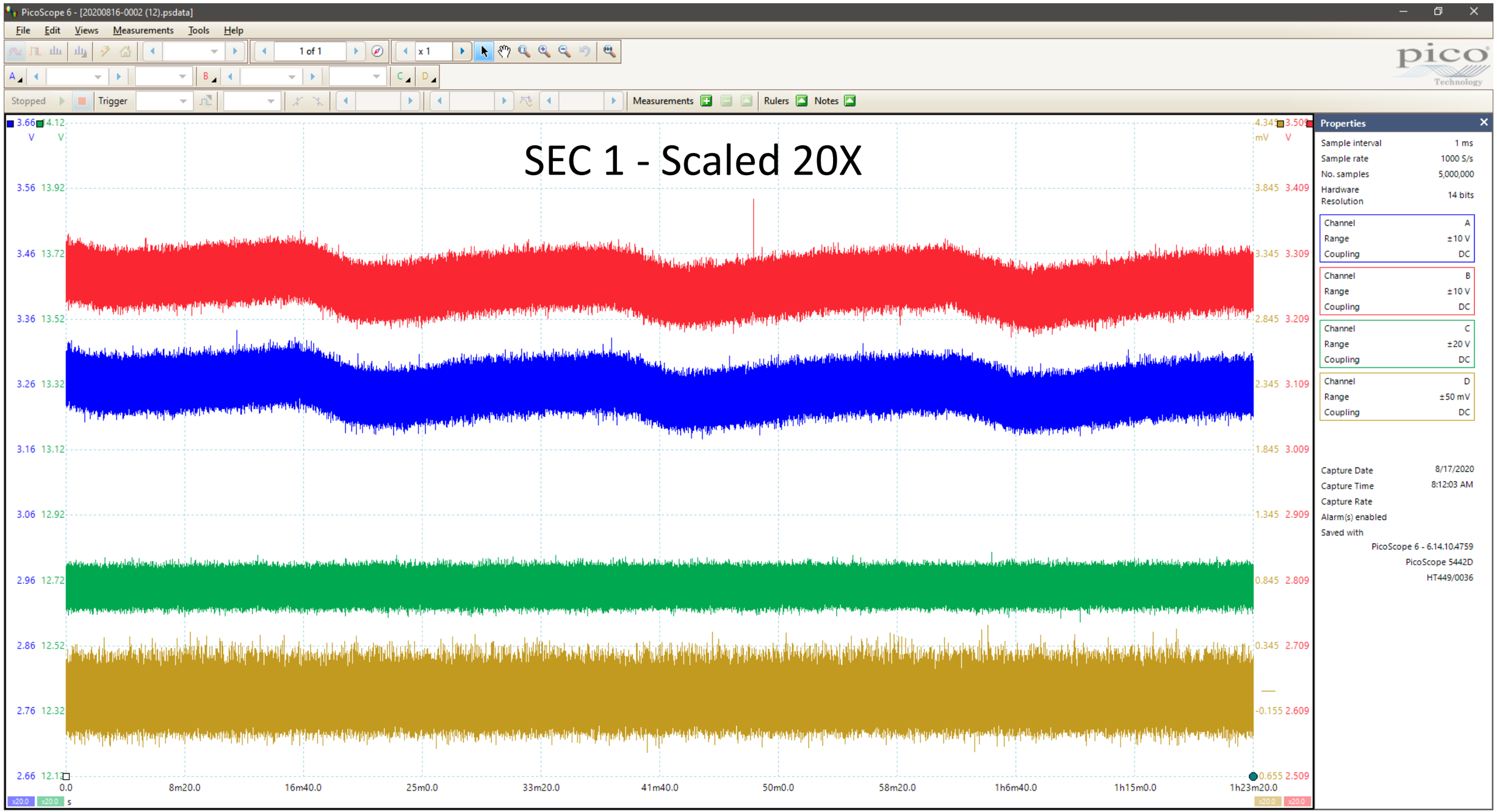
PICOLOG 6 - 5444D MSO Scope

File Name: Aug 17, 2020 3-47-17 PM

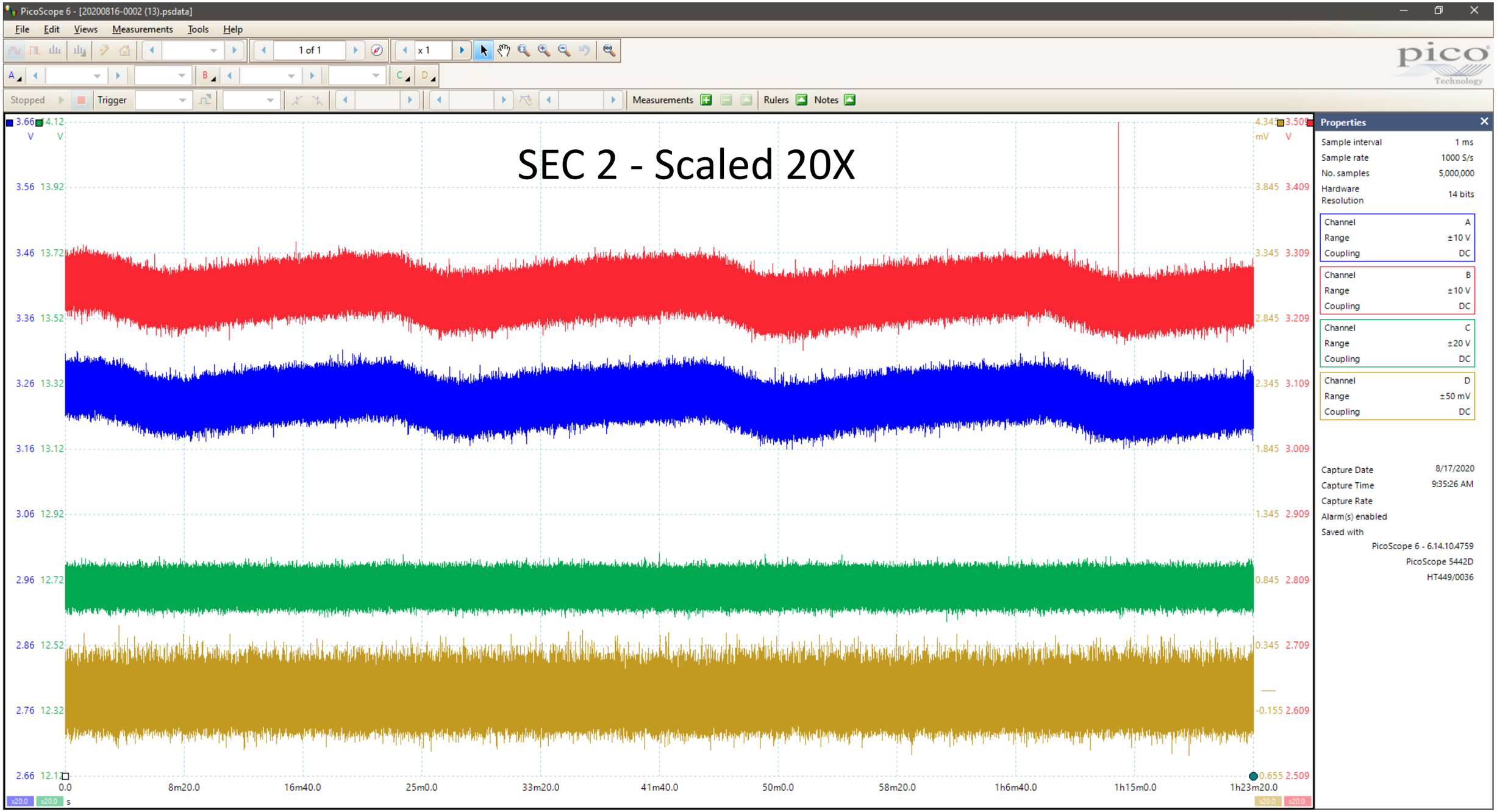
All waveforms recorded at 200ms sample rate—5 samples per sec—Red and Blue are temperature voltages—Green 12 Volt battery and Brown input is capped



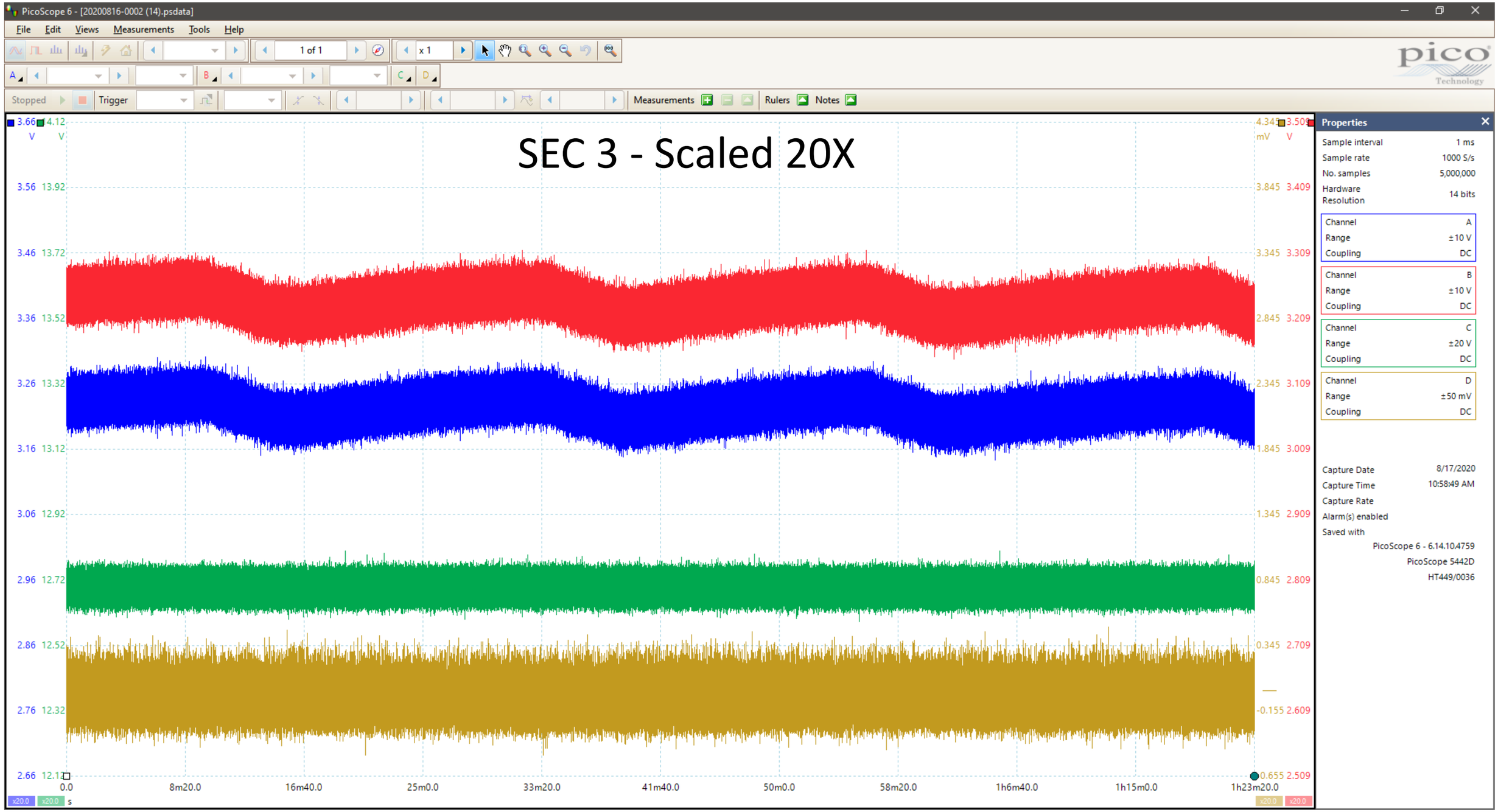
Picoscope 6 — 5442D scope — 6:50am to 8:12am



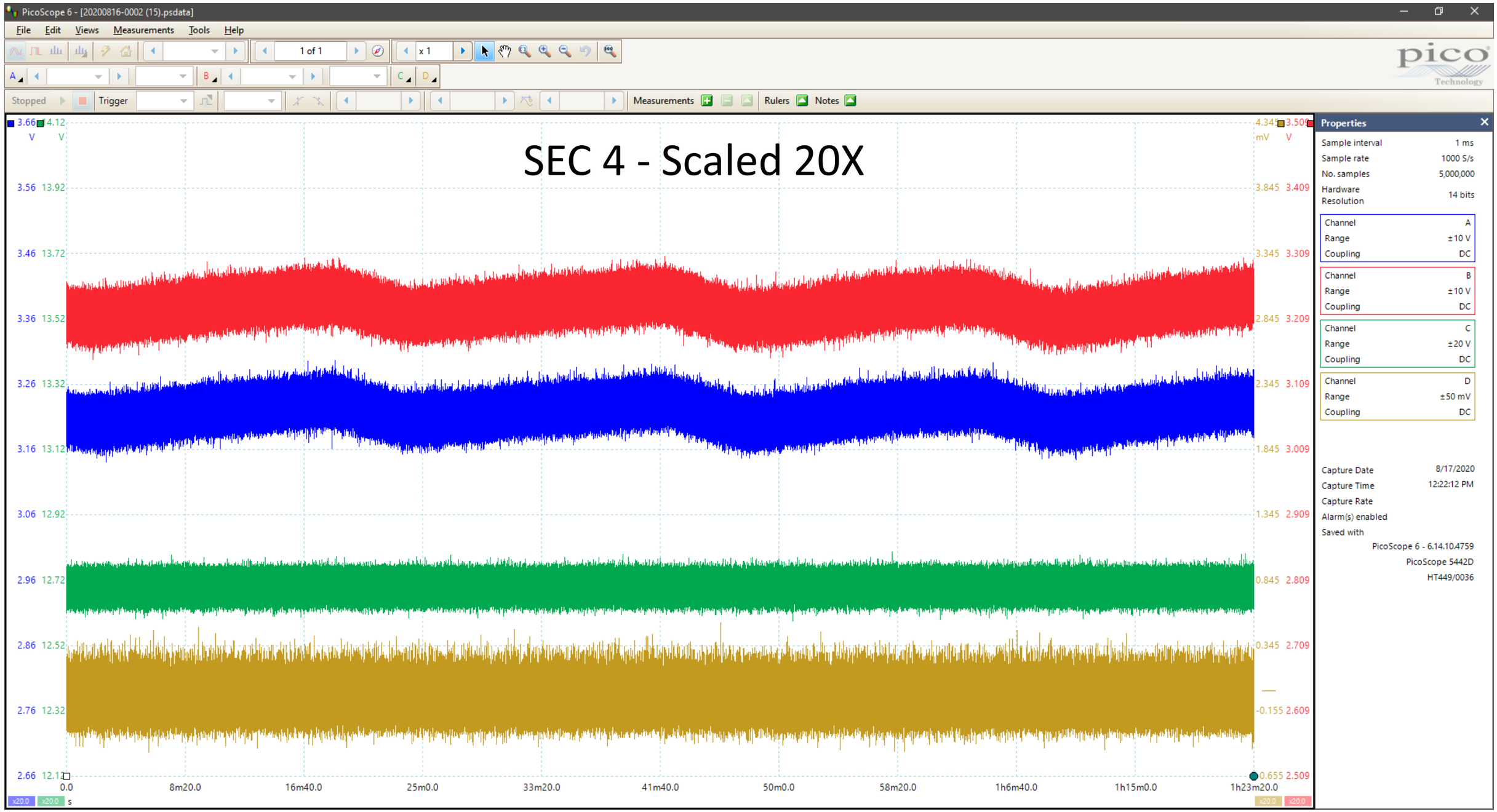
Picoscope 6 — 5442D scope — 8:14am to 9:35am



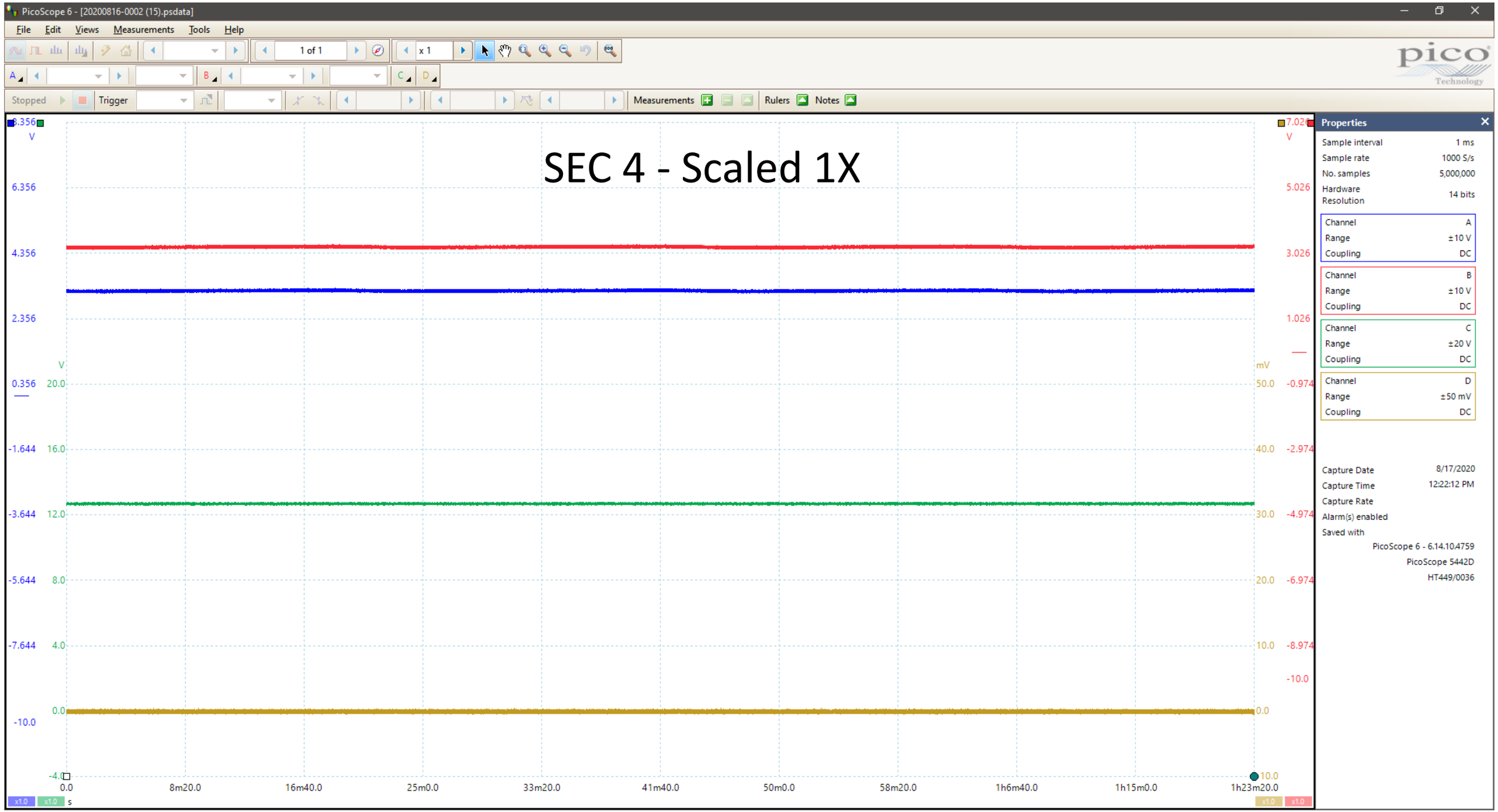
Picoscope 6 — 5442D scope — 9:37am to 10:59am



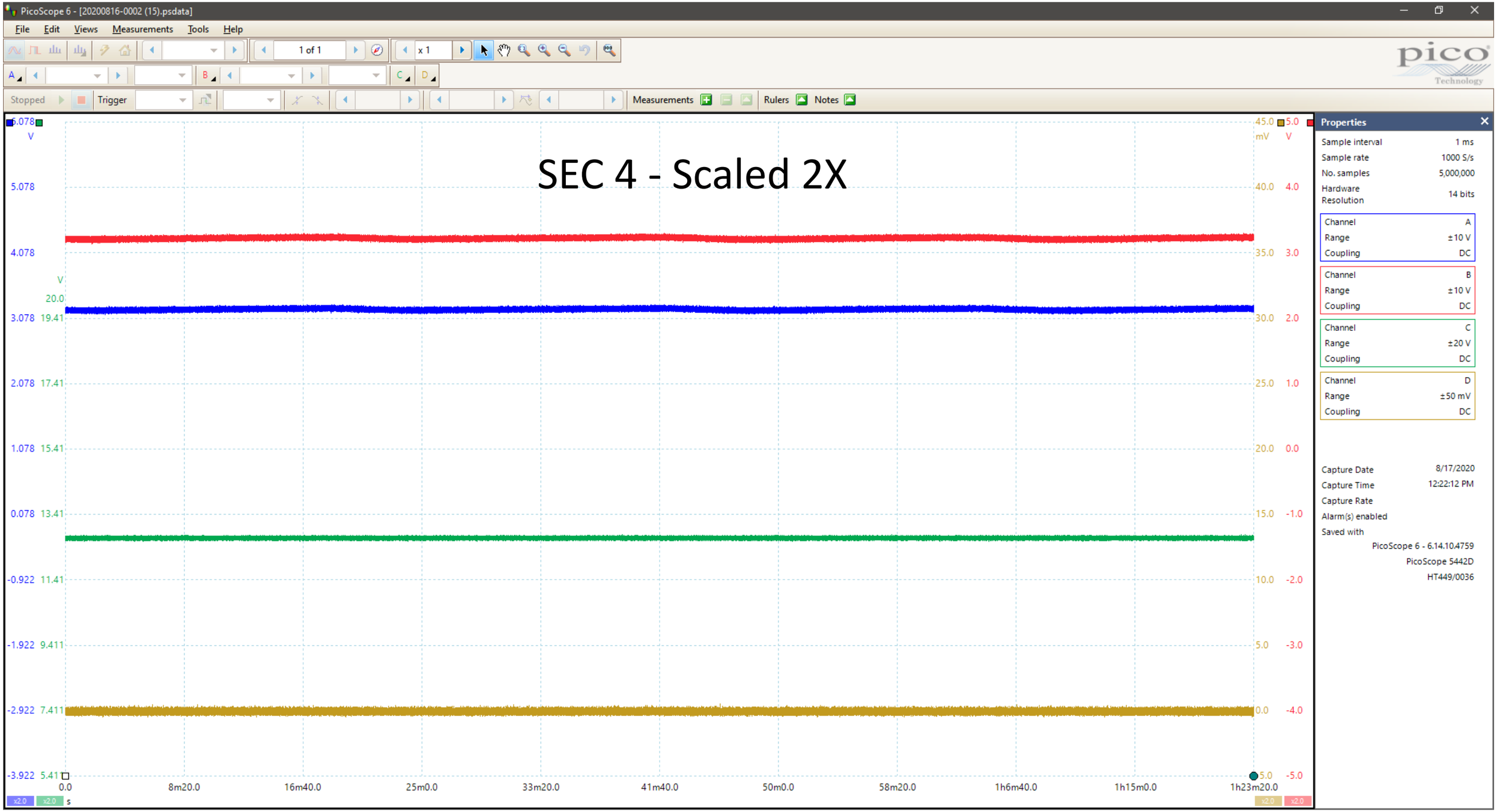
Picoscope 6 — 5442D scope — 11:00am to 12:22pm



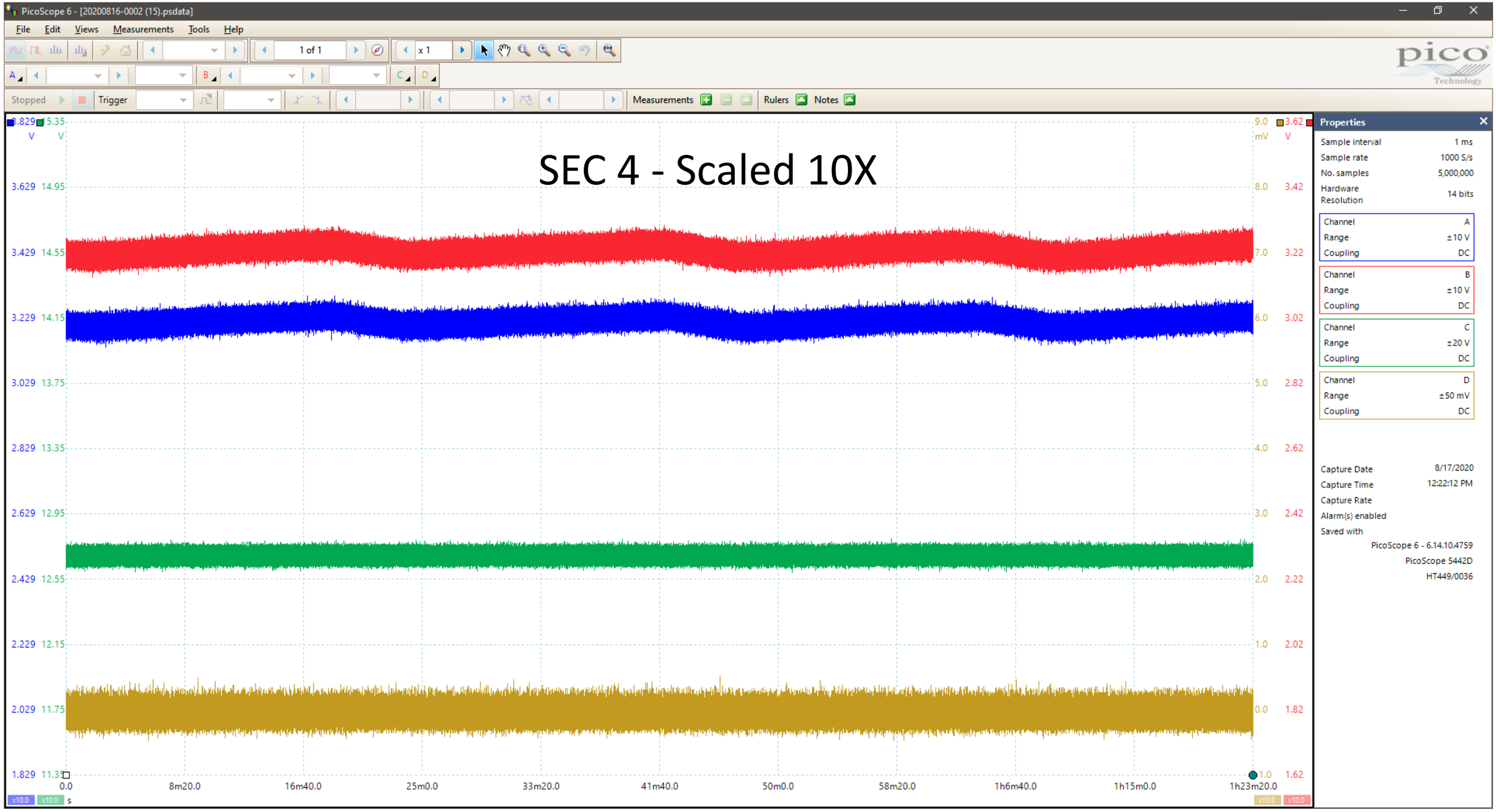
Picoscope 6 — 5442D scope — 11:00am to 12:22pm



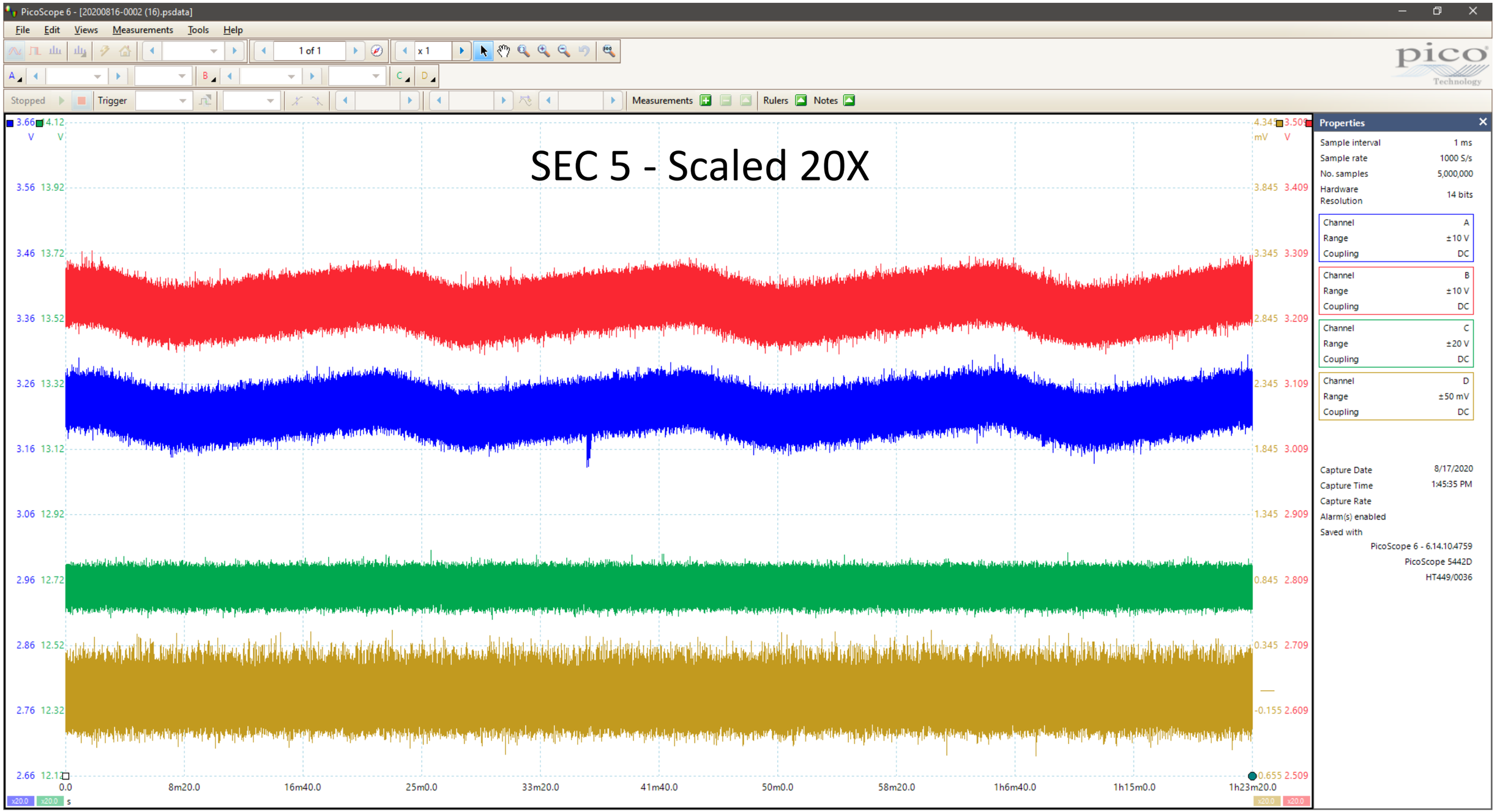
Picoscope 6 — 5442D scope — 11:00am to 12:22pm



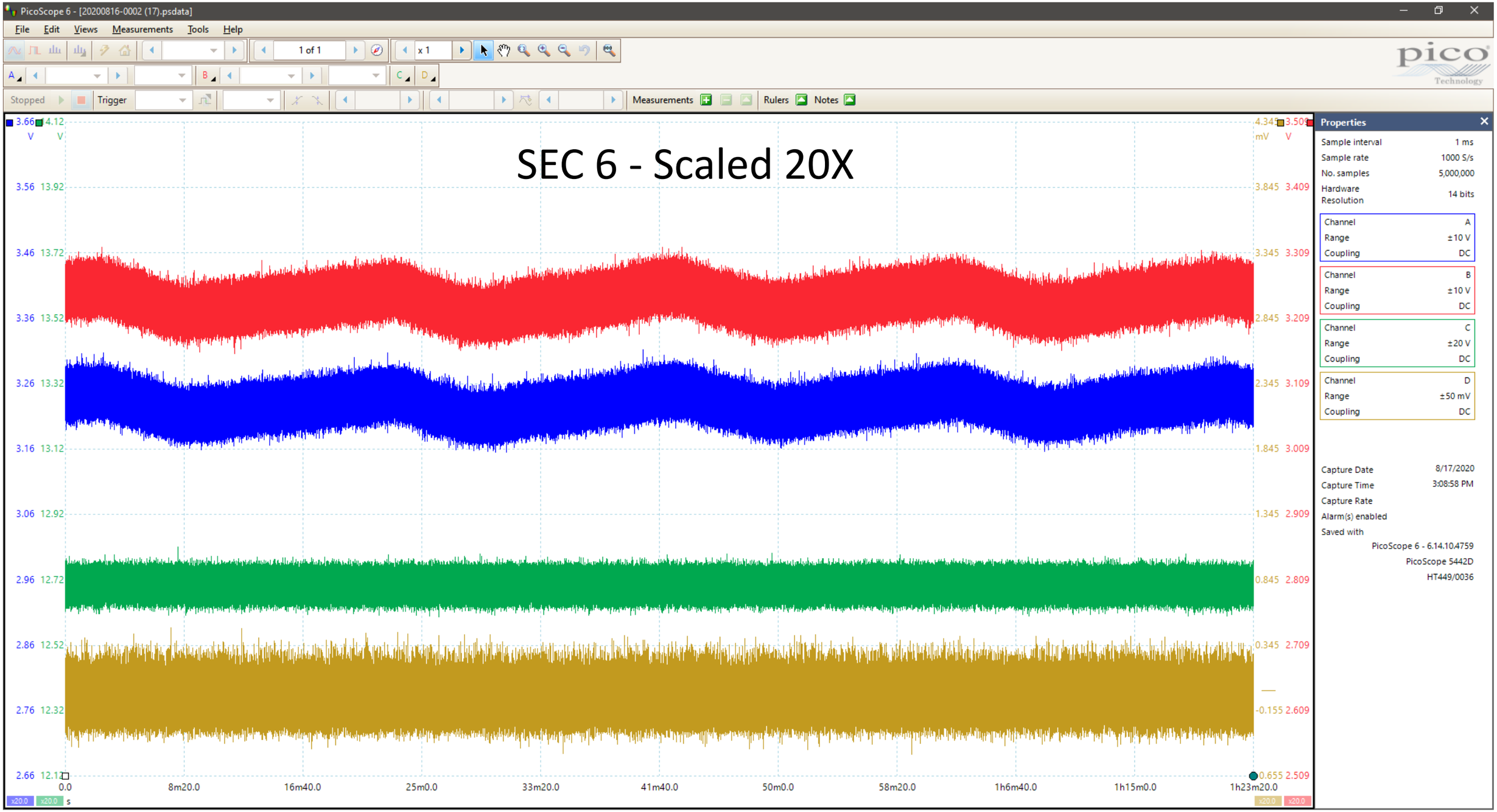
Picoscope 6 — 5442D scope — 11:00am to 12:22pm



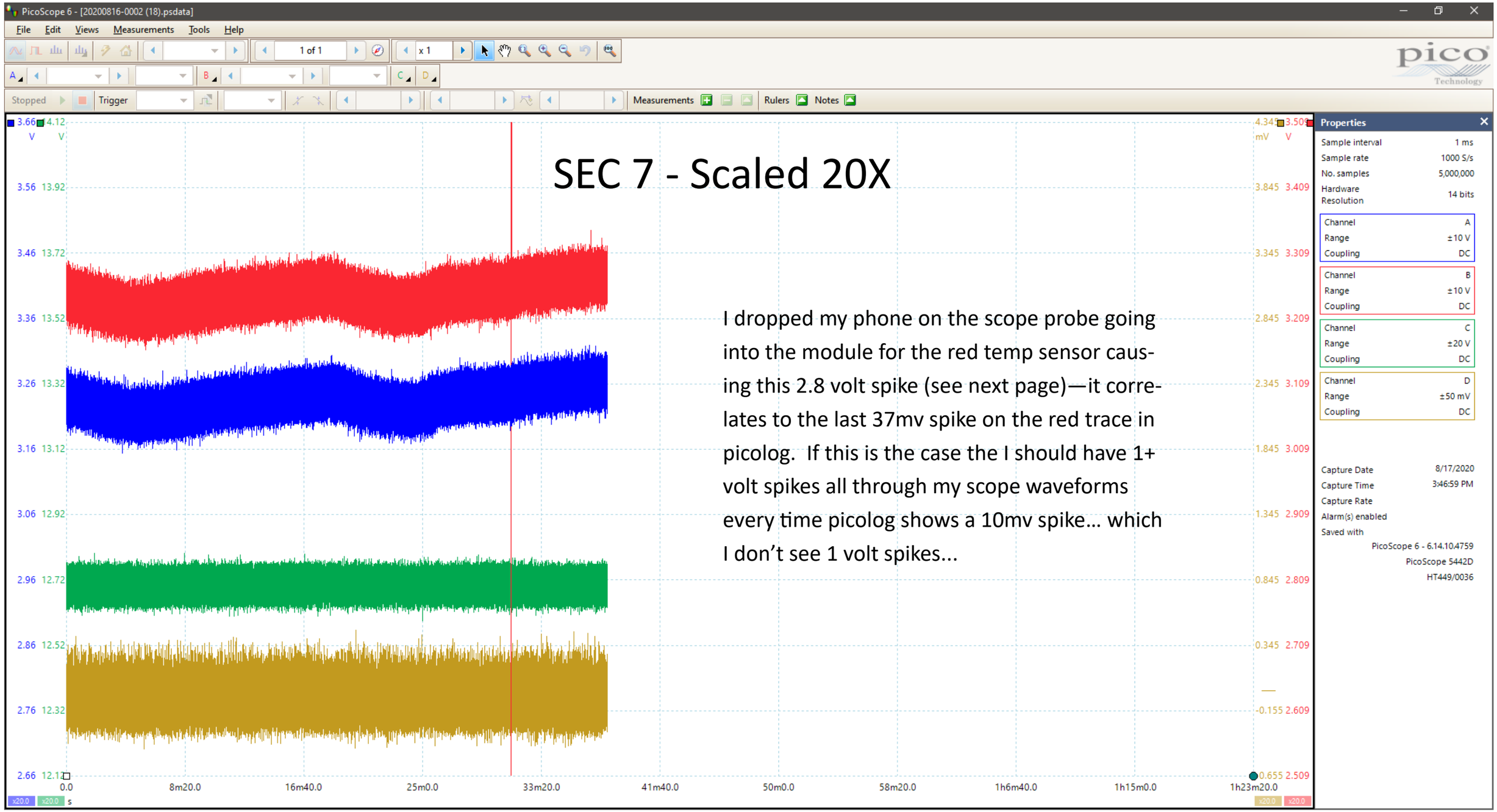
Picoscope 6 — 5442D scope — 12:24pm to 1:45pm



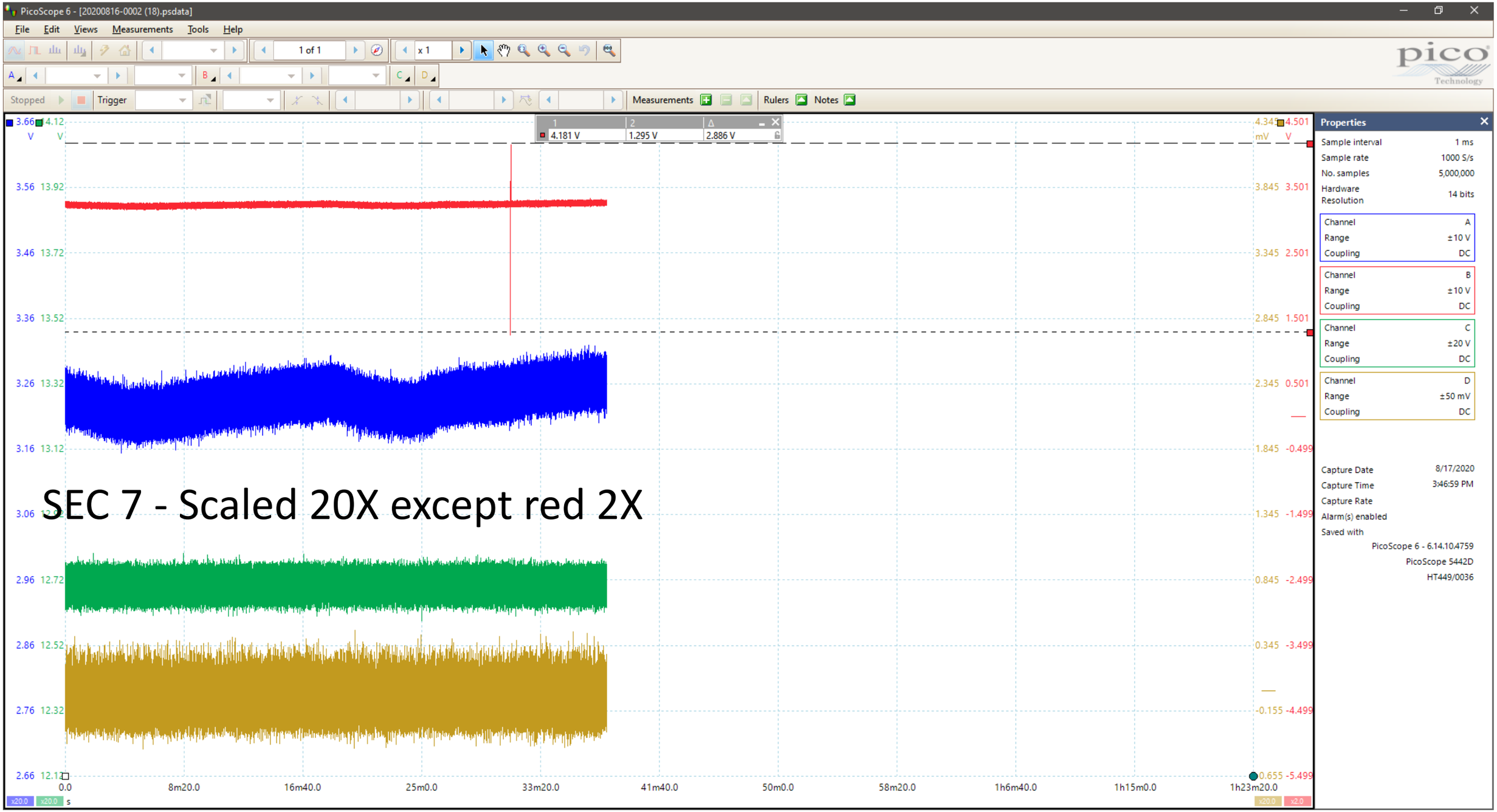
Picoscope 6 — 5442D scope — 1:47pm to 3:08pm



Picoscope 6 — 5442D scope — 3:10pm to 3:46pm



Picoscope 6 — 5442D scope — 3:10pm to 3:46pm



SEC 7 - Scaled 20X except red 2X

Picoscope 6 — 5442D scope — 3:10pm to 3:46pm

PicoScope 6 - [20200816-0002 (18).psdata]

File Edit Views Measurements Tools Help

Stopped Trigger Measurements Rulers Notes

1	2	Δ
31m13.0 s	31m14.0 s	1.05 s
1.229 V	4.17 V	2.941 V

Zoom Overview

SEC 7 - Scaled 20X except red 2X—ZOOMED VIEW

Properties

Sample interval	1 ms
Sample rate	1000 S/s
No. samples	5,000,000
Hardware Resolution	14 bits
Channel	A
Range	±10 V
Coupling	DC
Channel	B
Range	±10 V
Coupling	DC
Channel	C
Range	±20 V
Coupling	DC
Channel	D
Range	±50 mV
Coupling	DC
Capture Date	8/17/2020
Capture Time	3:46:59 PM
Capture Rate	
Alarm(s) enabled	
Saved with	PicoScope 6 - 6.14.10.4759
	PicoScope 5442D
	HT449/0036