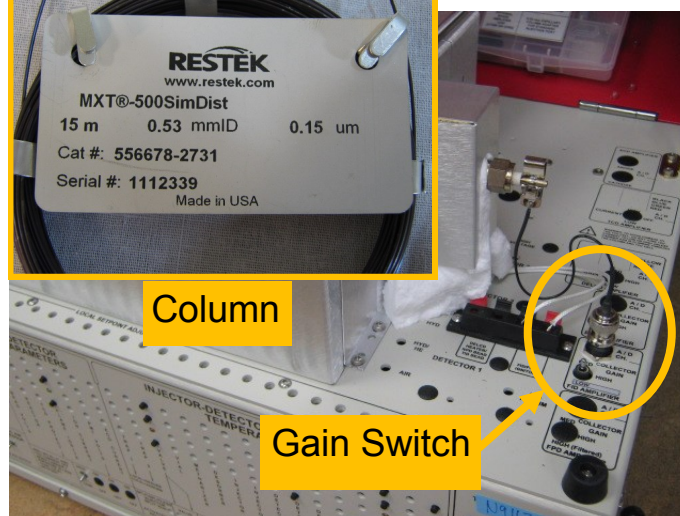
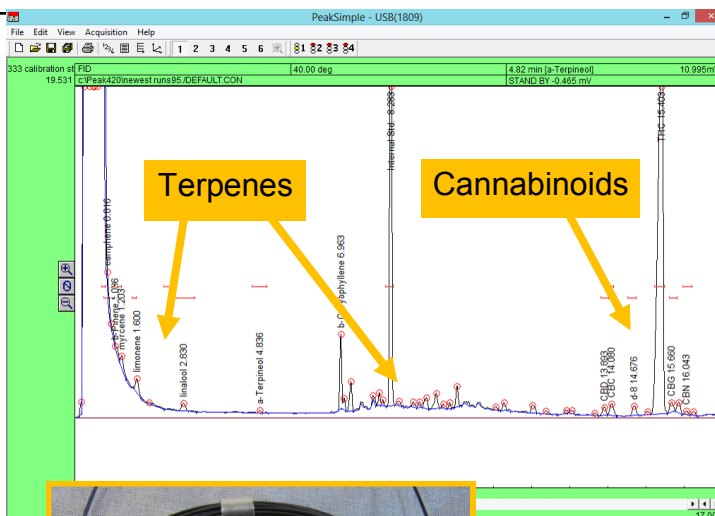


# Medical Cannabis Potency and Terpenes Analysis Using the SRI 8610C FID GC

The cannabinoids (psychoactive components) and terpenes (aroma compounds) can be measured quantitatively on one 20-minute run using the stock medical cannabis potency column (15-meter MXT-500 with a .15 um film) on an 8610C FID Medical Cannabis Potency GC.

Refer to the “Medical Cannabis Potency” Document found on our website [www.srigc.com](http://www.srigc.com) in order to setup the software, extract and inject the sample, and interpret the results. The only difference between the potency analysis and running potency *and* terpenes is the **gain setting** and the **temperature program**.

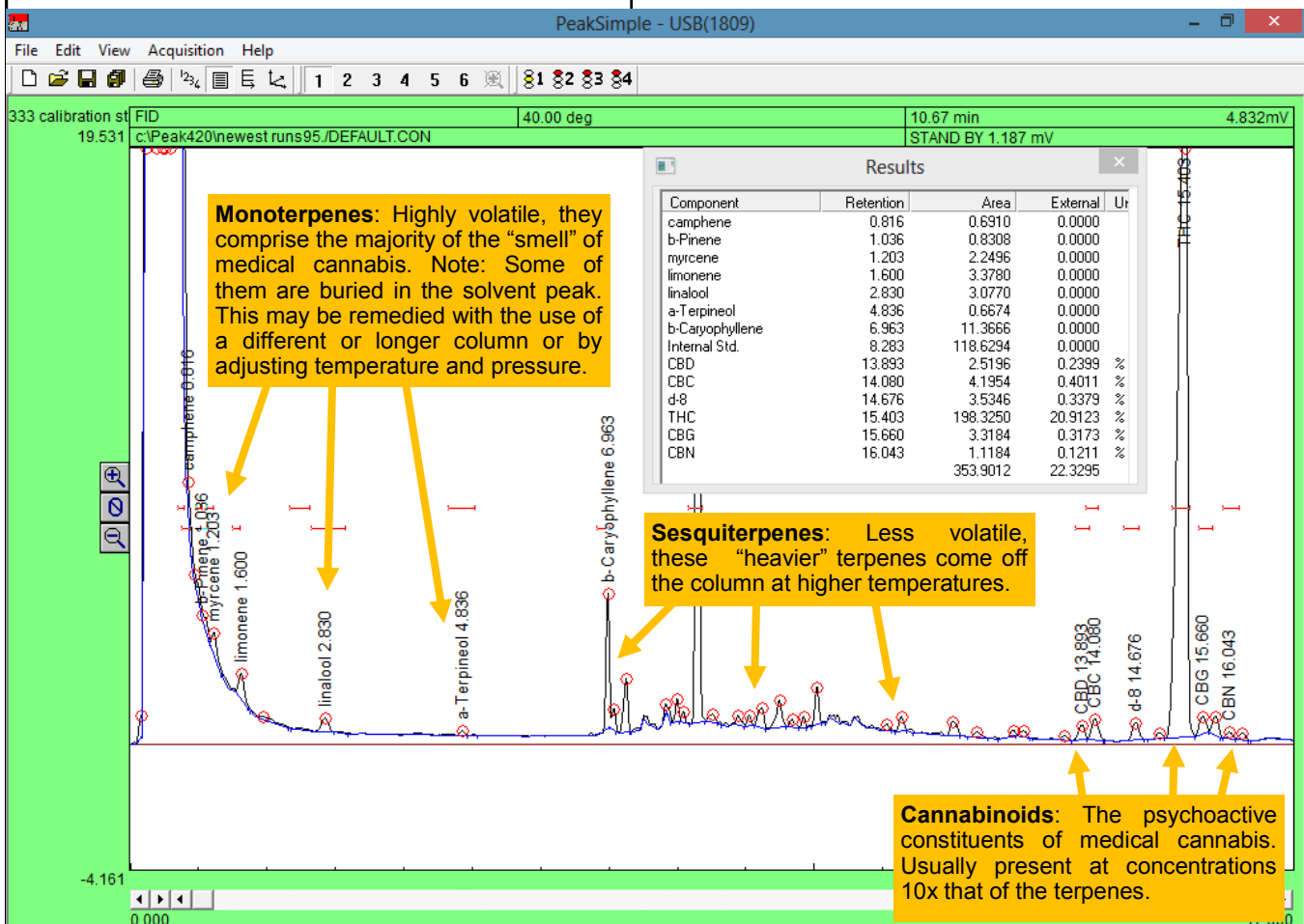
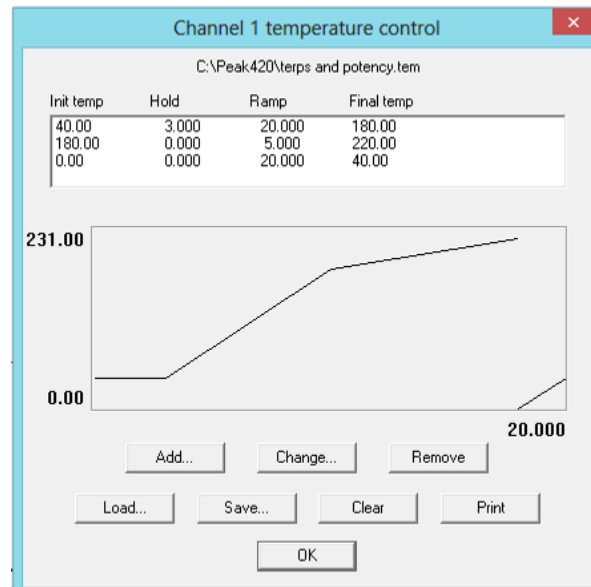
With the red lid open and staring down, the FID gain switch is located next to the FID detector on the far right of the GC. Usually the gain switch for the FID detector is set up to “MED”. For this analysis, put the switch in the middle position on “**HIGH**”. This will make the FID sensitivity about 20 times greater. This is important because the terpenes are present at much smaller concentrations in cannabis samples than the cannabinoids. This may present a problem with concentrates exceeding 40% THC (the peak will go off-scale) but typical cannabis flowers will present no problems. **Remember to recalibrate after changing the gain setting.**



# Medical Cannabis Potency and Terpenes Analysis Using the SRI 8610C FID GC

The temperature program for the potency and terpenes run is shown to the right. The temperature begins and holds for 3 minutes at 40 C to allow the most volatile terpenes to separate. Between 180 C and 220C a slower temperature ramp achieves optimum separation of the cannabinoids.

A terpenes and potency chromatogram will look something like the one below. The cannabinoids have been calibrated, the terpenes have not.



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