

Table S1. Composition and pure concentration of the multi-component calibrant. Uncertainty for all values is $\pm 5\%$.

Compound	Concentration (ppbv)
Pentane	15.40
Isoprene	40.30
Methyl Vinyl Ketone	17.50
Hexane	9.96
Benzene	15.00
α -Pinene	17.60
1,3,5-Trimethylbenzene	12.40
Limonene	8.30
Nopinone	8.92
α -Cedrene	4.35
α -Humulene	4.40

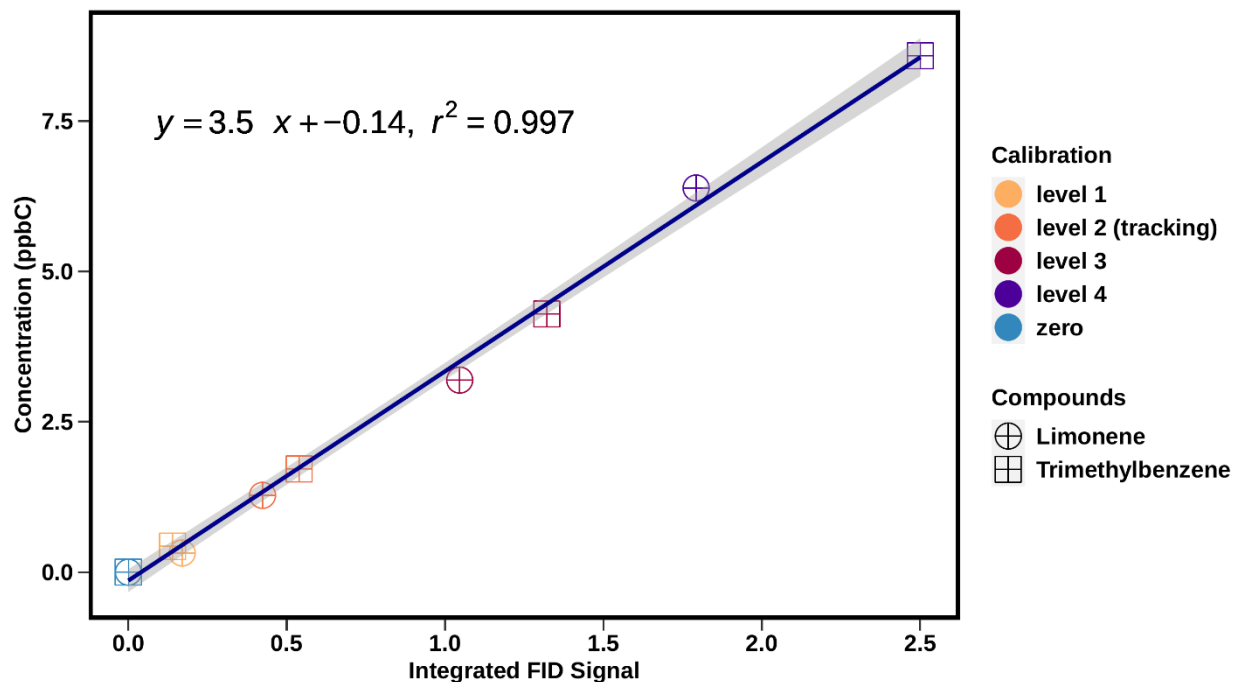


Figure S1. A linear regression plot between the integrated FID signal and the calibrant concentration for one-week of Limonene and TMB calibrations. The shading represents the standard error (3.5 ± 0.07) of the residuals to account for the uncertainty of the slope of the linear regression. Colors represent different calibration levels (i.e., different dilution flows) and symbols represent calibrants.

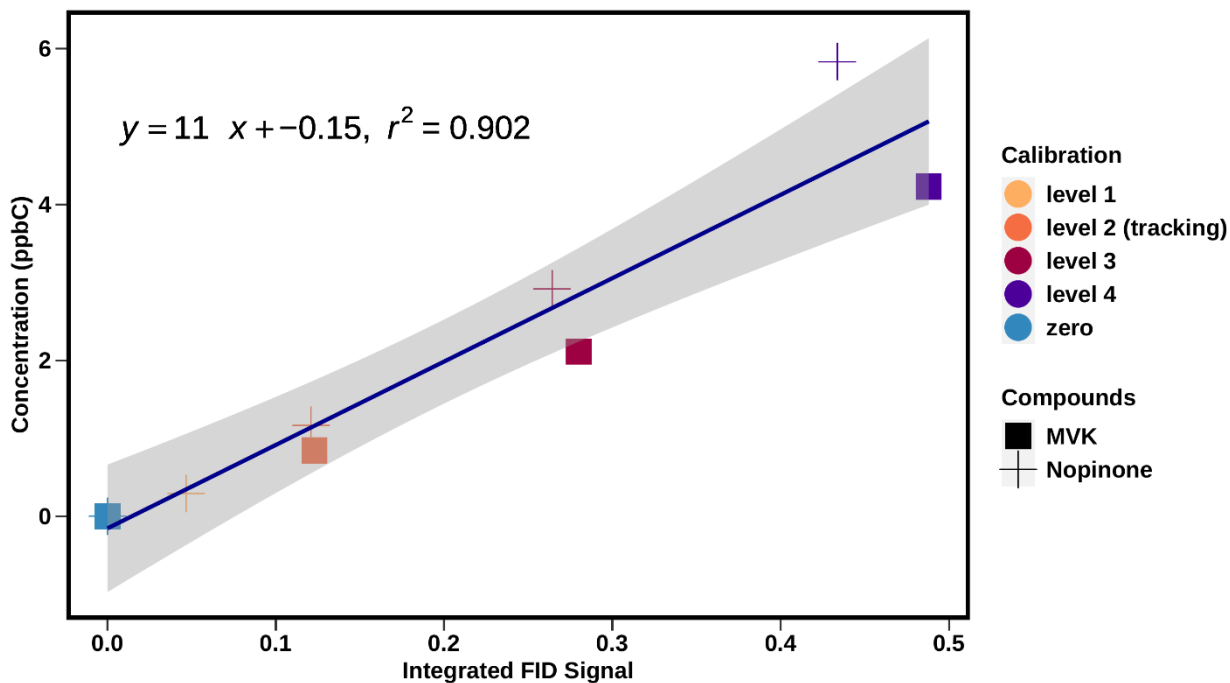


Figure S2. A linear regression plot between the integrated FID signal and the calibrant concentration for one-week of MVK and Nopinone calibrations. The shading represents the standard error (11 ± 1.3) of the residuals to account for the uncertainty of the slope of the linear regression. Colors represent different calibration levels (i.e., different dilution flows) and symbols represent calibrants.