(3) **Quality control analysis and screening.** The following analysis and screening are only required for samples that have not been previously tested, or that have failed quality control testing.

(a) **Cannabinoid concentration analysis and reporting.**

(i) Certified labs must analyze for the following cannabinoids when testing for cannabinoid concentration. Labs must report concentrations for the following cannabinoids and any additional cannabinoid compounds tested to the board via the board’s traceability system:

(A)

| **Cannabinoid** | **Lower Limit of Quantitation (mg/g)** | **Limit of Detection**  **(mg/g)** | **CAS #** |
| --- | --- | --- | --- |
| CBD | 1.000 | 0.3000 | 13956-29-1 |
| CBDA | 1.000 | 0.3000 | 1244-58-2 |
| Δ9-THC | 1.000 | 0.3000 | 1972-08-3 |
| Δ9-THCA | 1.000 | 0.3000 | 23978-85-0 |

(ii) **Total THC. Laboratories must report the total THC concentration as the sum of the concentrations of Δ9-THC and** Δ9-THCA and the concentrations of any additional THC compounds tested and detected in the cannabinoid concentration analysis, regardless of whether the THC compound is required to be tested by the board under this subsection.

(A) To calculate the total THC if only delta-9 THC and delta-9 THCA are tested, the following formula must be used, where M is the mass or fraction of the THC compound: M total delta-9 THC = (0.8770 x delta-9 THCA) + delta-9 THC.

(B) To calculate the total THC if THC compounds, other than delta-9 THC and THCA, are tested and detected, the following formula must be used, where M is the mass or fraction of the THC compound: M total THC = ((0.8770 x M delta-9 THCA) + M delta-9 THC) + ((conversion factor x M THC acid)+ M THC compound).

(iii) **Total CBD**. To calculate total CBD, the following formula must be used, where M is the mass or fraction of CBD and CBDA: M total CBD = (0.8770 x M CBDA) + M CBD.

(vi) Regardless of analytical equipment or methodology, certified labs must accurately measure and report the acidic and neutral forms of the cannabinoid concentrations to the board in the board’s traceability system.