

**CLARIFICATION NUMBER CAO-00-013, REV. 2**  
**GC/MS TUNES, INITIAL CALIBRATIONS AND CONTINUING CALIBRATIONS FOR**  
**VOC GAS**  
**(TABLE B3-3)**

**ISSUE**

What are the requirements for “GC/MS tunes, initial calibrations and continuing calibration” for volatile organic compound gas methods?

**CONCLUSION**

The following should be applied to VOC Gas Analyses in addition to the requirements in Table B3-3:

Technique	Procedure	Frequency of Procedure	Acceptance Criteria
GC/MS	BFB Tune	Every 12 hours	Abundance criteria for all key ions are met
	5-pt initial calibration (5 standards)	Initially, and as needed	%RSD of response factor for each analyte < 35
	Continuing Calibration	Every 12 hours	%D for all compounds ≤ 30 of initial calibration
GC/FID	5-pt initial calibration (5 standards)	Initially, as needed	If %RSD<20 a correction factor can be used in lieu of a calibration curve.  If %RSD>20 see Method 8000–linear regression (R>0.99)
	Continuing calibration	Every 12 hours	%D ≤ 15%

BFB = 4-Bromofluorbenzene  
%D = Percent difference  
%RSD = Percent relative standard deviation  
RT = Retention time

**DISCUSSION**

The permit specifies Table B3-3 as the source for GC/MS calibration information for VOC gases. However, the information does not appear in the table. Therefore the CAO has specified the above values consistent with other tables in the permit.