C:\Users\Pat\AppData\Roaming\Defiant\20150303\0924_LOG_106.xml

Parameter	Value
Ta	300
Tb	60
Tc	60
Ct	50
Ht	100
Collect	30
Clean	4
Presettle	4
Settle	2
Fire	6

This application note will help you with setting the appropriate run parameters to perform an analysis of MTBE and BTEX. In addition, you can use this note to determine the correct elution order for these analyte on the FROG. If you are analyzing MTBE and BTEX on the FROG-4000, the settings on the left are the If you are also looking for TCE and PCE but not more volatile chlorinated alkenes, the settings on the left will also work for you. You might ask why not have one set of parameters that work for all applications. That is certainly possible and that application note can be found on our website at www.defiant-tech.com/downloads.php. For most people having one short analysis optimized for their analyte set maximizes their productivity and economizes their time.

The elution order for MTBE and BTEX can be seen in the chromatogram above. As you can see from the above chromatogram, p-xylene and m-xylene coelute. During calibration these two chemicals are combined under the name p/m-Xylene. Combining them means that for every calibration concentration level, their concentrations will be added together. For example, if the calibration standard contains 100ppb of p-xylene and 100ppb of m-xylene then their combined concentration as p/m-xylene is 200ppb.

Hint: Sometimes it is easier to start with the last peaks than trying to identify peaks starting with the first one. The picture on the right shows the feature that application support looks for when we are identifying the various peaks in MTBE/BTEX. Then we go backwards in elution next looking for toluene, benzene, and finally MTBE if it is present. This trio of peaks is ethylbenzene, pm-xylene, and o-xylene. The feature is distinctive in a chromatogram and can often help if peaks at the beginning are confusing.