



Parameter	Value
Ta	300
Tb	60
Tc	60
Ct	40
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 chlorinated alkenes. In addition, you can use this note to determine the correct elution order for these analytes on the FROG. If you are analyzing chlorinated alkenes on the FROG-4000, the parameters on the left are the appropriate parameters. Vinyl chloride and 1,1-dichloroethene are difficult chemicals to analyze even under perfect conditions. We recommend the following. For many analytes, it is okay to drop the bottle while loading a sample when analyzing for these two compounds keep the empty sparge bottle secured to the sparge block and load the sample through the introduction valve as normal. Also, if you are collecting the water sample from a grab sampler, pour the water directly into the end of the syringe and then insert the plunger. This will minimize loss of volatile compounds.

The elution order is the order in which chemicals travel through the column. The figure at the top shows vinyl chloride eluting first and tetrachloroethene eluting last. The elution order for common chlorinated alkenes can be seen in the chromatogram above.

Helpful hint: If you want better retention and separation for the early eluting compounds, you can lower the cold temperature if ambient conditions allow. We recommend that the cold temperature be at least 5 C hotter than the ambient temperature if you are analyzing MTBE, BTEX, and chlorinated alkenes on the FROG-4000, you can find those parameters at www.defiant-tech.com/downloads.php.