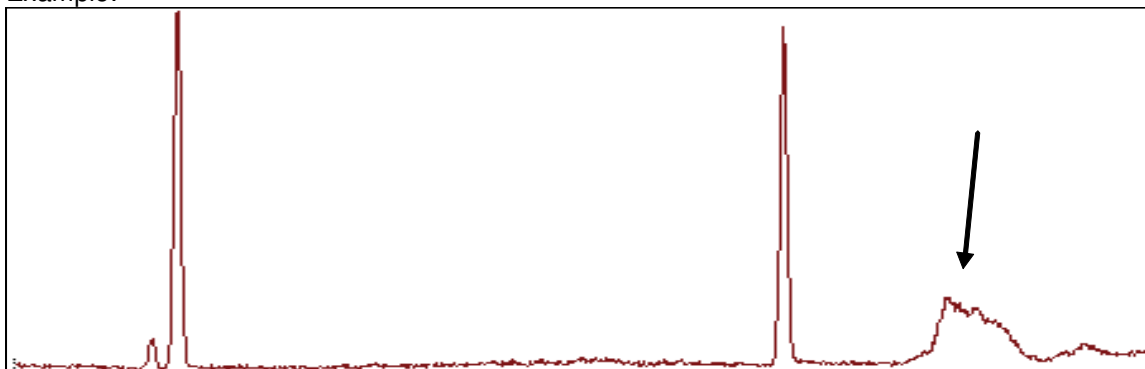


KORY'S TECK-TIPS

What can I do to remove column carryover?

Example:



Answer:

This chromatogram is a classic example of column carryover. The most common cause of carryover is a high boiling compound that is introduced onto the column that has a retention time that is longer than the previous run time. Since the compound didn't elute in the previous run, the compound elutes on the next run. This is supported by the bad peak shape of the 'contaminant' compared to the sharp peak shape of the other compounds. The retention time of this peak may not be consistent because the time in between injections may not be consistent.

You do have options to minimize or remove the contaminant.

- First, you can determine what this peak is and/or the source of the compound and see if you can remove the compound from the sample. It may be native to the sample or coming from the extraction or anywhere in the sample preparation process. It is not coming from the solvent though if repetitive solvent blanks did not show the carry over.
- Second option, chromatographically allow for the peak. Increase the final temperature to elute the contaminant off faster in the current run so the contaminant will not carry over into the next run. This will add a little time to the analysis time though but will ensure that the peak doesn't interfere with the next chromatogram.

Key words: ghost peak, carryover, bad peak shape

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