

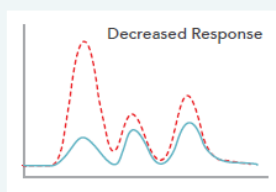


عیب یابی در GC

مشکل شماره ۱۰: کاهش حساسیت

Sensitivity Loss Some or all peaks are displaying decreased response.

Symptom



Possible Cause

Contamination of column and/or liner can lead to loss of sensitivity for active compounds.

Injector leaks reduce the peak height of the most volatile components of a sample.

Initial column temperature is too high for splitless injection prevents refocusing of sample. This affects the more volatile components most.

Inlet discrimination: injector temperature is too low. Later eluting and less volatile compounds have low response.

Issues with the sample.

Suggested Remedy

Clean liner.

Bake out the column. Solvent rinse or replace the column.

Find and fix any leaks.

Lower temperature below the boiling point of the solvent. Decrease the initial column temperature, or use a less volatile solvent.

Increase the injection temperature or use on-column injection with direct connect liner.

Check the sample concentration, any sample preparation procedures, and shelf life. Prepare a fresh sample ensuring the proper concentration.