Using Column Compensation in GC Mode

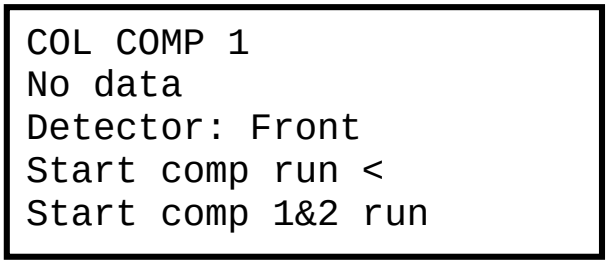
MS ChemStation G1701BA/CA/DA

The ChemStation integrates peaks more accurately and reproducibly on a flat baseline than on a rising baseline. If you are using GC detector signals, you can use **column compensation** to correct for baseline rise during temperature programming for GC signals. This feature is not available for MS Data.

First, use the 6890 keypad to store a column compensation signal for one or both detectors while making a blank run (one with no sample injected). The GC stores the data from this run, and can then subtract it from real run data to produce a flatter baseline. The chromatographic conditions for a column compensation run must be identical to those you'll use in the real run. Use the same detector and column, operating under the same temperature and gas flow conditions.

To set up and use Column Compensation for GC data, proceed as follows:

1. Load your method from the ChemStation Top Level menu. Then exit the ChemStation software altogether. This leaves the GC under keypad control, but with your method loaded to it.
2. Make a column comp run on the GC as follows:
   - On the 6890 keypad, press the [Col Comp1] key.



- Press [Enter]; this will begin a column compensation run as soon as the GC becomes “ready." It will use the current method.
- If you scroll down to Start comp 1 & 2 run and press [Enter], this will begin column comp runs for both detectors.

3. Start the MS ChemStation, and from the **GC Edit Parameters** panel, select **Signals.** Under **Signal 1,** Select **Det** and then (for Source) specify the detector you will use for the real run and the column compensation data you want to be subtracted from the real run data:
    - ♦ Front det - col comp 1
    - ♦ Back det - col comp 1
    - ♦ Front det - col comp 2
    - ♦ Back det - col comp 2

Note: To plot the data from a column compensation run, select **Det** (at the Signals dialog box), specify a **Source** of **col comp 1** or **col comp 2**, and make the run.