



# Microanalytics

## Contract Analytical Services - Case Study

---

### Case Study #2 *Malodor / Malflavor in Bottled Drinking Water*

**Internal Reference:** Project Code Number E03226

**Industry:** Beverage

**Commodity:** Bottled Drinking Water

**Problem / Goal:** 'Sulphurous' malodor / malflavor in production lot of 1 pint PET packaged bottled drinking water.

**Analytical Approach:** AromaTrax™ MDGC-MS-O system utilized to isolate the 'character defining' malodorant. This information was then used to screen production lots previous to and subsequent to the odor/flavor quality excursion.

**Findings:** This odor / flavor quality defect was found to be carried by a single malodorant of extreme odor potency.

**Resolution:** These results were used to screen a number of production lots for the suspect packaging line as well as parallel packaging lines. This effort enabled the flavor defective production lot to be isolated and normal production and shipment to be resumed.

**Comments:** This problem was found to result from a transient excursion of unknown origin and as a result of combined factors of limited defective sample availability and extreme odor potency, initial identification efforts were not successful. A decision was made by the client not to pursue this identification effort further unless the problem re-surfaced in the future.

---

### Links for More Information

Aroma and malodor contract services: [www.off-odor.com](http://www.off-odor.com)  
Analytical Instrumentation for aroma/odor analysis: [www.mdgc.com](http://www.mdgc.com)



**Microanalytics**™

Gas Chromatography Systems and Services

A **MOCON**® Company

2011A Lamar Drive - Round Rock, TX 78664

[www.mdgc.com](http://www.mdgc.com)