

Application Note No. 118

## **FAMEs with SilFlow™ micro channel systems for backflush**

### **Key Words:**

Fame  
Silflow  
Backflush

---

Iwan Horsting / Geert Alkema / Mitsuhiro Kurano

### **Introduction**

This application note is made to show the performance of the SGE Silflow micro channel systems in combination with the OPTIC-4 Multimode Inlet equipped with auxiliary gas channel. In this test the Silflow is placed in the front of the column, just after the OPTIC-4 inlet. This setup is used to prevent that anything will go to the column. It is used for in-inlet derivatization, drying water based samples etc.

This test is only to see if there is a difference in peak shapes with or without the SilFlow micro channel system connected in the front of the analytical column.

### **Experimental information**

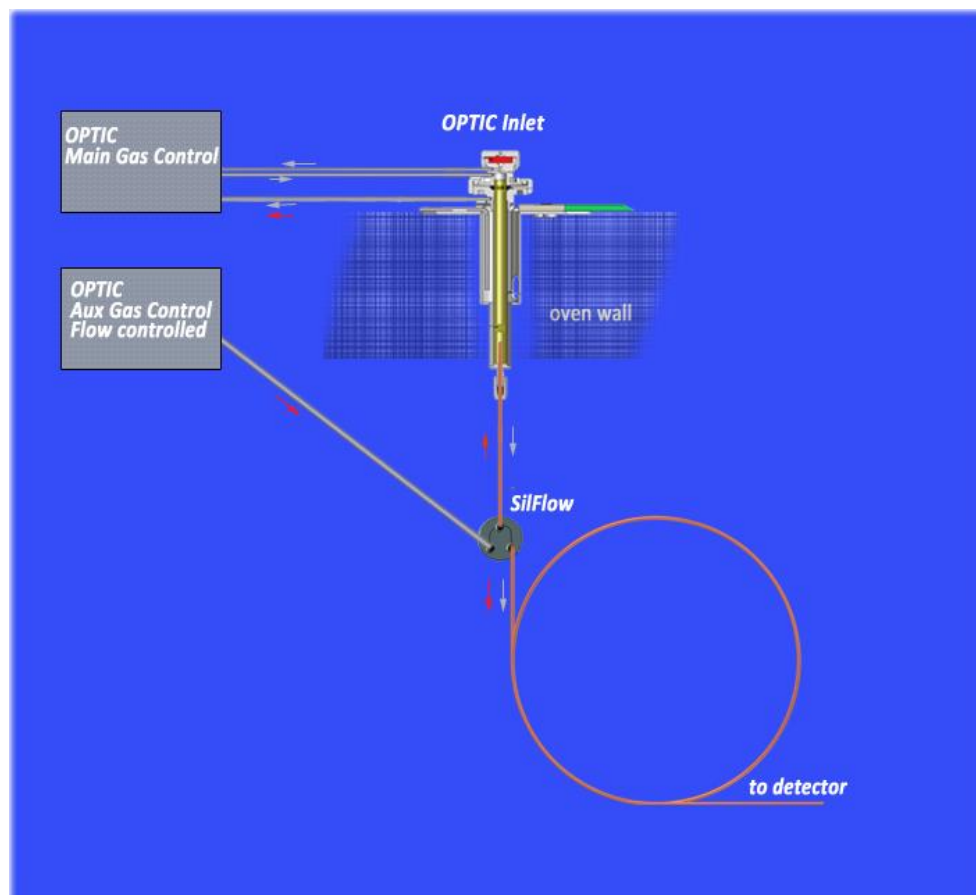
#### Equipment:

- Shimadzu QP2010 GC/MS
- ATAS GL OPTIC-4 with auxiliary flow channel
- ATAS GL fritted liner
- GL Sciences, InertCap 5MS/SIL, 0.25 mm ID x 30 m, Film 0.25 µm
- SGE SilFlow

#### Sample:

- Supelco® 37 Component FAME Mix

Figure 1.  
Diagram of backflush setup  
as used in the test.



## Results

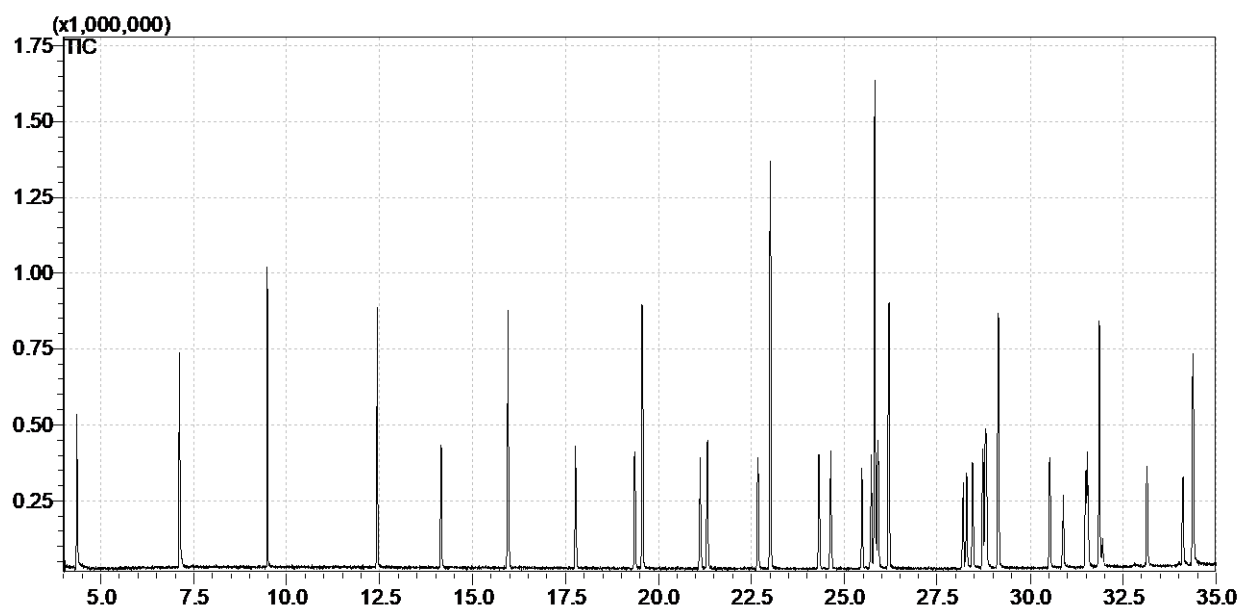


Figure 2: Column only (no Silflow)

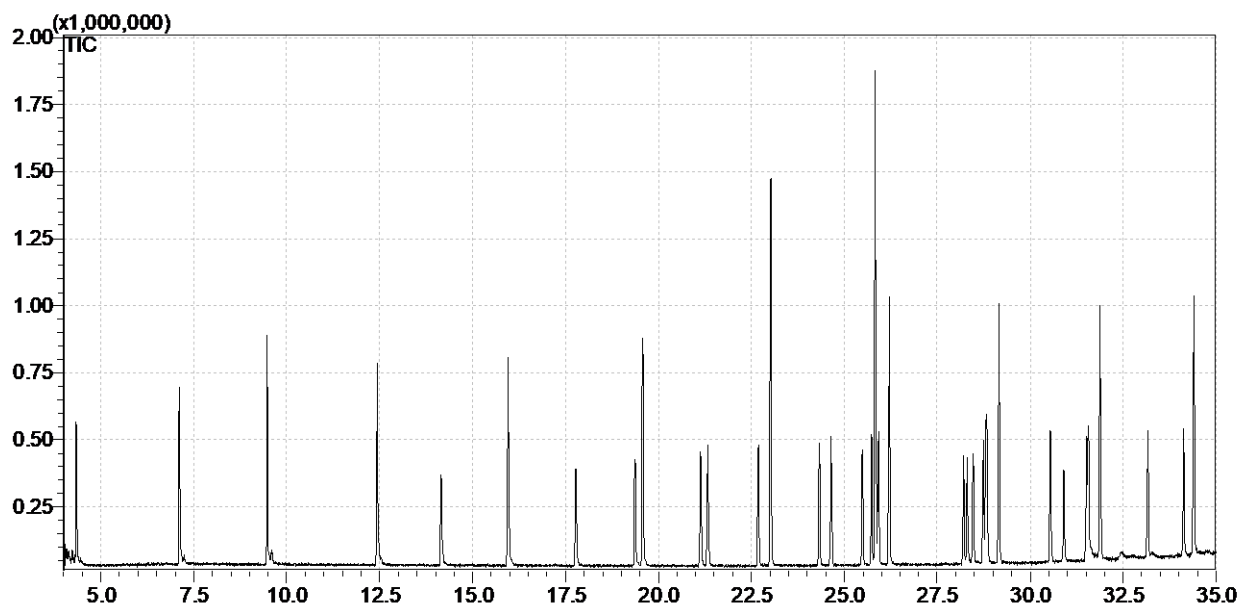


Figure 3: With SilFlow, Aux flow is set to 0 ml/min.

**Conclusion:**

With SilFlow, there is almost no peak broadening or dead volume problems in comparison with column only.