

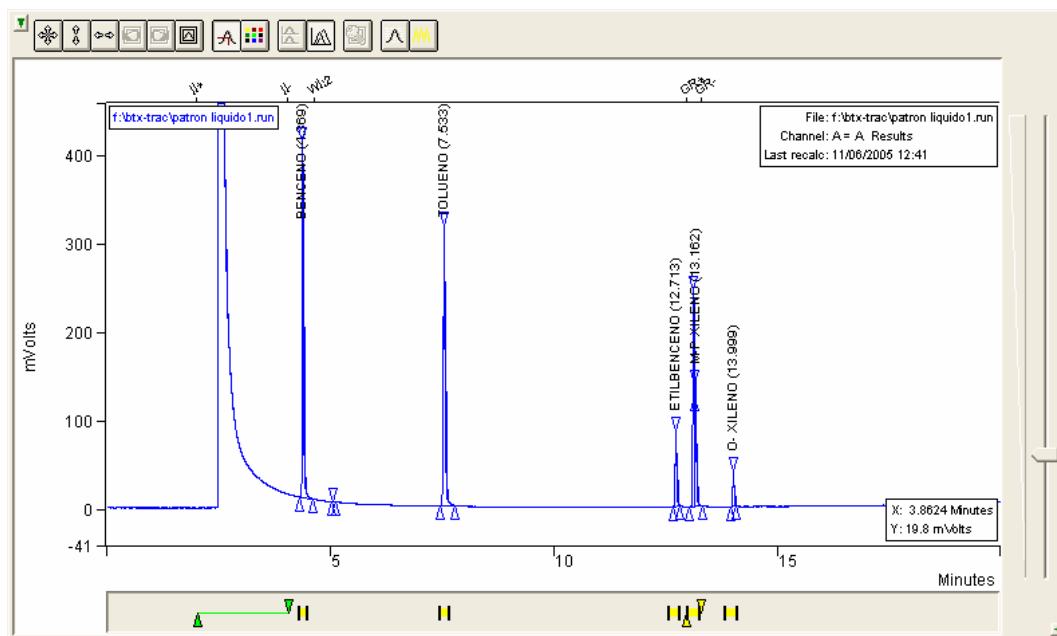
## DETERMINACION DE TRAZAS DE AROMATICOS BTEX EN AGUAS

Nota de Aplicación Sis-02

## AROMATICS

**BTEX:** 300ppm in methanol  
**Column:** 30m x 0.25 mm ID  
**Initial Temp:** 60°C, 10 min.  
**Detector Type:** FID  
**Carrier Gas:** He, 17.3 psi  
**Carrier Gas Flow:** 1.5 mL/min.  
**Constant Flow:** On  
**Average Linear Velocity:** 35 cm/sec at 60°C  
**Injection Mode:** Split  
**Split Ratio:** 100:1  
**Injection Volume:** 0.2 µL  
**Injection Temperature:** 250°C  
**Autosampler:** No  
**Liner Type:** 4 mm ID Double Taper Liner

1. Benzene
2. Toluene
3. Ethyl benzene
4. p-Xylene
5. m-Xylene
6. o-Xylene



### Comparison between on-column injection and dynamic headspace in the determination of Benzene, Toluene and Xylenes (BTEX) in water.

The analysis of water samples containing volatile organic compounds has become an important task in analytical chemistry. Gas chromatography has been widely used for the analysis of volatile organic compounds in water. The headspace analysis shows as a principal characteristic the possibility of determination of the volatile components in drinking water. Benzene, Toluene and Xylene (BTEX) are important compounds usually present in drinking water, from contamination by petroleum derivatives. Since they are toxic compounds even when present in low concentration levels, their determination is important in order to define the quality of the water. The sampling technique using headspace, coupled with gas chromatography as the separation method, showed to be suitable for BTEX analysis in several samples at the µg/L (ppb) level.