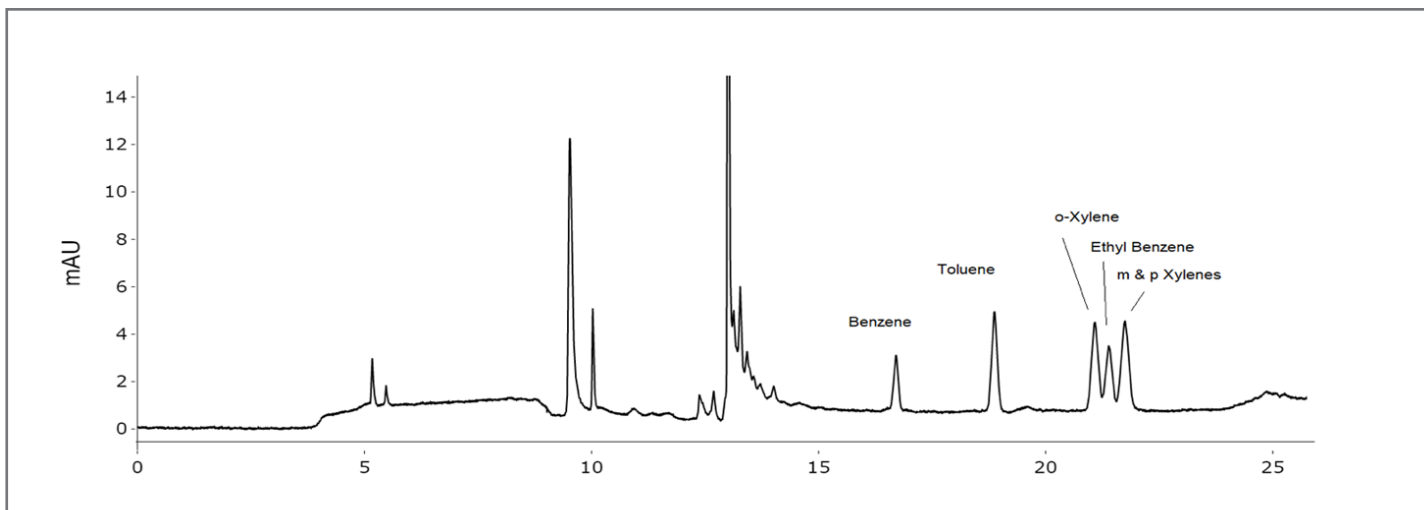




HPLC Separation of BTEX in Process Water

281-PT



PEAK IDENTITIES:

1. Benzene
2. Toluene
3. o-Xylene
4. Ethylbenzene
5. m-, p-Xylenes

TEST CONDITIONS:

Column: HALO 90 Å C18, 2.7 µm, 0.25 x 170mm

Mobile Phase:

A: 94.5/5.0/0.5 Water/ Acetonitrile/ formic acid

B: Acetonitrile

Gradient:	Time	%B
	0.0	3
	9.0	5
	10.0	50
	22.0	62
	30.0	90

Flow Rate: 1.5 µL/min

Pressure: 276 bar

Temperature: Ambient

Detection: 255 nm, UV

Delay Volume: 1 µL

LC System: Axcend Focus LC

Data Courtesy of: Axcend

Benzene, toluene, ethylbenzene, and xylene (BTEX) are compounds that occur naturally in crude oil and can be found in sea water close to natural gas and petroleum deposits where drilling occurs.

BTEX compounds are created and used during the processing of petroleum products. In this application, a separation of BTEX at 6 ppm is performed using a HALO® C18 capillary column on an Axcend Focus portable LC.

Liquid chromatography is an alternative method to gas chromatography, which eliminates the use of a flame and hydrogen gas which is ideal for off- shore oil rigs. Smaller column internal diameters, like capillaries, allow for higher sensitivity which can benefit those who are working with very small sample concentrations.

