Waters™

Applikationsbericht

Estrogens in River Water at 5 ng/L - Endocrine Disruptors

Waters Corporation

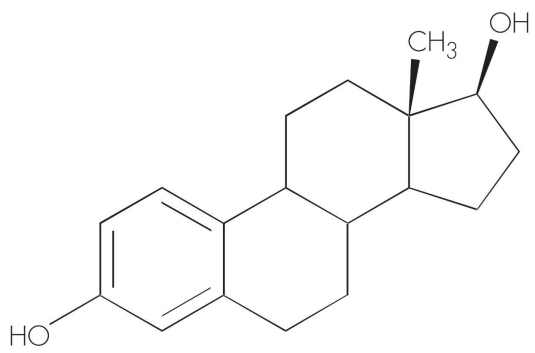
This is an Application Brief and does not contain a detailed Experimental section.

Abstract

This application brief highlights on analysis of Estrogens in river water.

Introduction

The compounds analyzed in this application brief are Diethylstilbestrol, Estrone, Ethynylestradiol, Estradiol, Bisphenol A.



17β-ESTRADIOL

Experimental

LC Conditions

Column:	XTerra MS C_{18}, 2.1 x 100 mm, 3.5 µm
Part Number:	186000404
Mobile phase A:	NH_4OH in water, pH 10.5
Mobile Phase B:	Acetonitrile

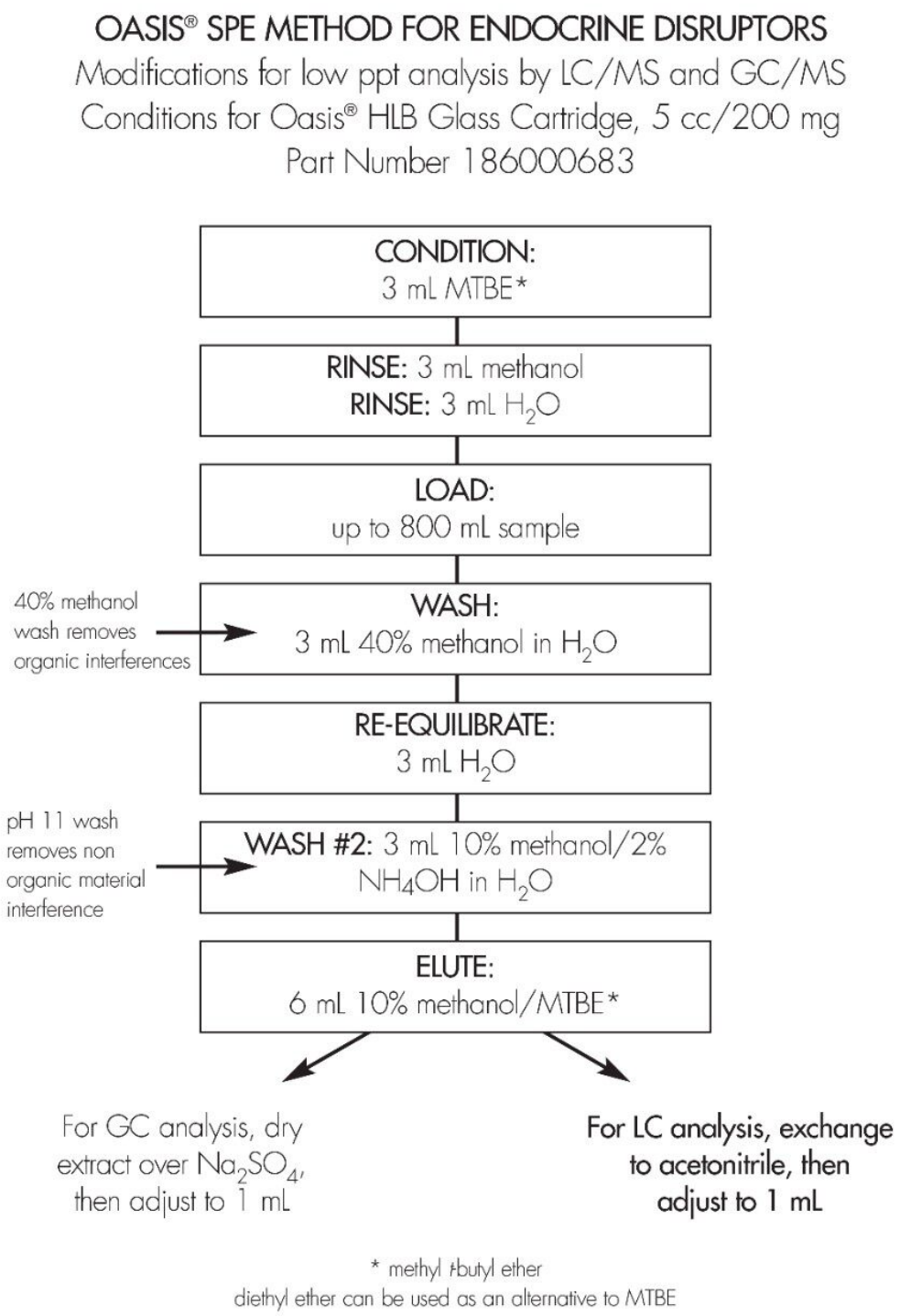
Injection volume:	20 µL
Flow rate:	200 µL/min, plumbed directily to detector
Instrument:	Waters Alliance Separations Module

Gradient

Time (min)	Profile	
	%A	%B
0	70	30
8	35	65
9	10	90

MS Conditions

Instrument:	Waters/Micromass Platform LC
Interface:	Negative Electrospray (ESI-)
	Multiple Selected-Ion Recording (SIR)
	Core voltage 27 V



Results and Discussion

Compounds	Results, n=4
1. Diethylstilbestrol	75% ± 5%
2. Estrone	87% ± 5%
3. Ethynylestradiol	94% ± 12%
4. Estradiol	93% ± 15%
5. Bisphenol A	113% ± 11%

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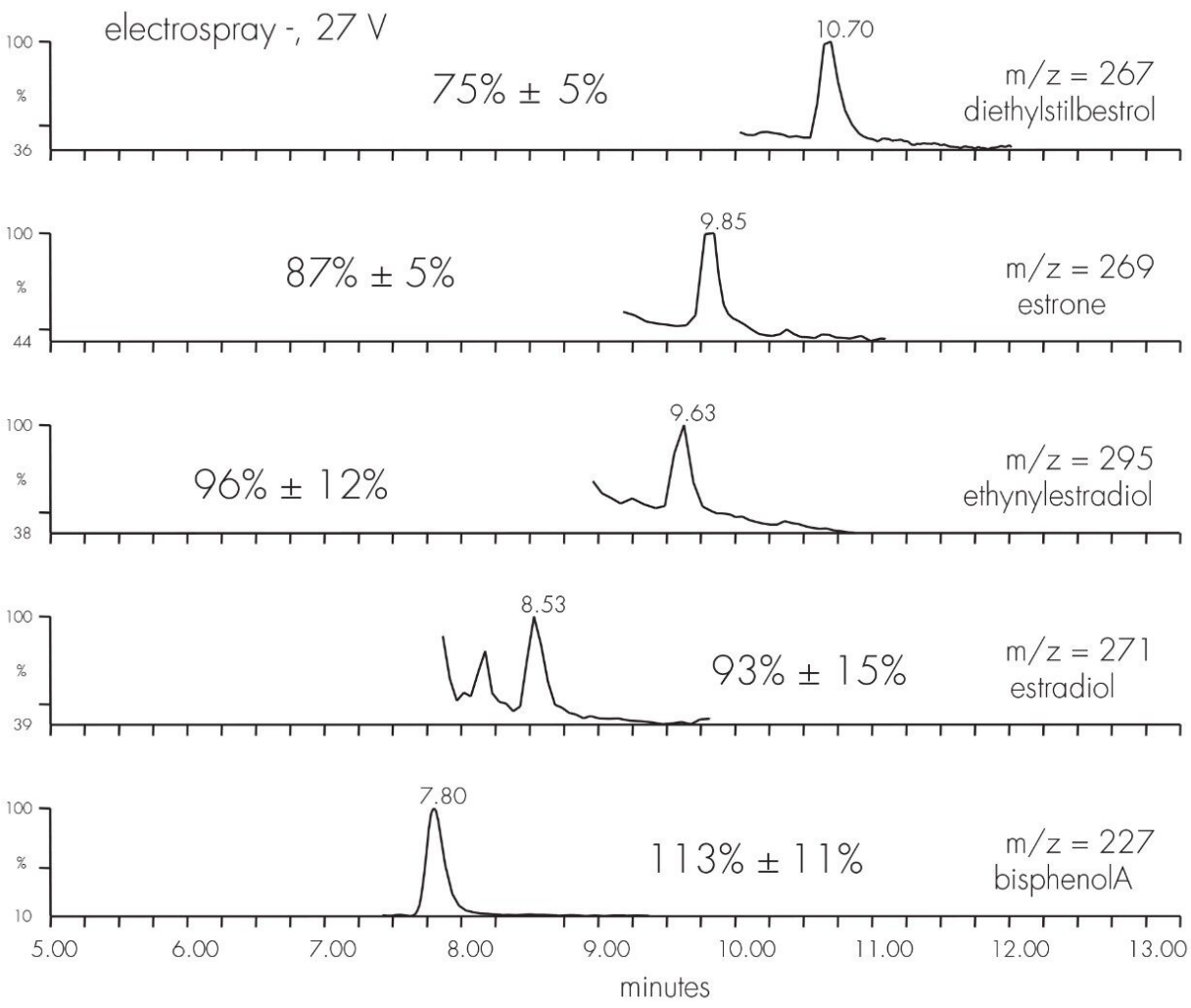
5 ng/L Spike level



Featured Products

Alliance HPLC System <https://www.waters.com/534293>

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