Waters™

Nota de aplicación

Naphthoic Acids in Groundwater

Waters Corporation

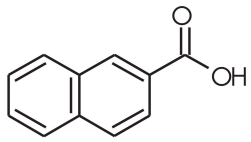
This is an Application Brief and does not contain a detailed Experimental section.

Abstract

This application brief highlights the analysis of naphthoic acids in groundwater using Oasis MAX separation method.

Introduction

Naphthoic acids and naphthalenes in contaminated groundwater is detrmined in this application brief.



2-NAPHTHOIC ACID

Experimental

LC Conditions

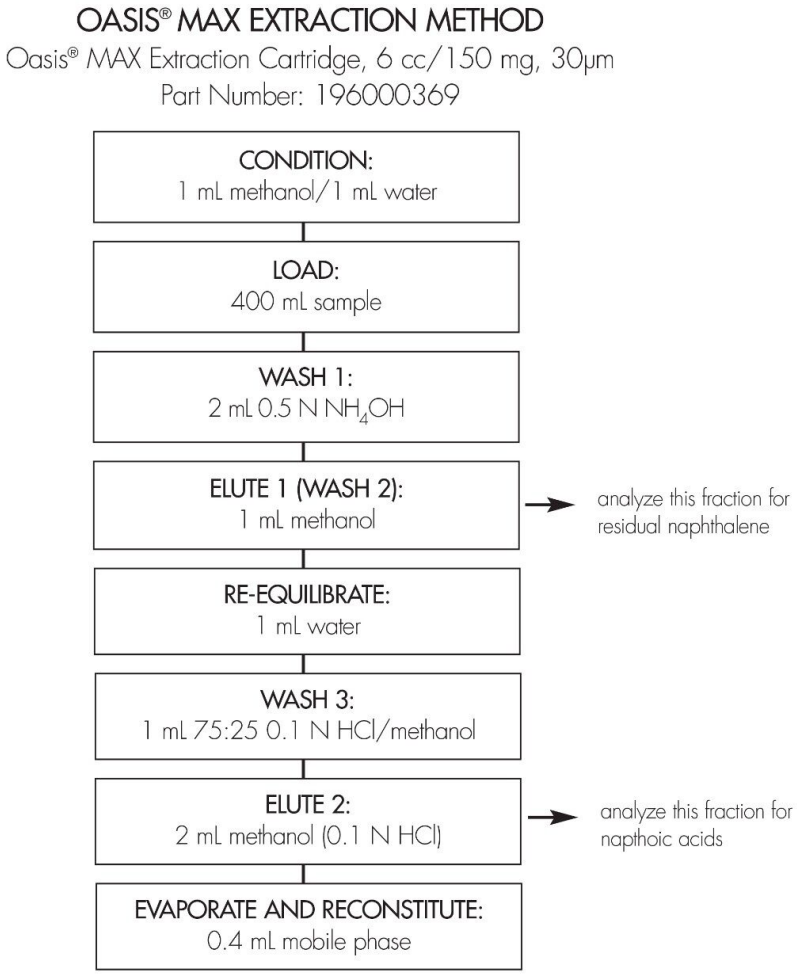
Column:	XTerra MS C_{18}, 2.1 x 100 mm
Mobile phase A:	15 mM Ammonium formate
Mobile phase B:	ACN
Flow rate:	200 µL/min
Injection volume:	20 µL
Instrument:	Alliance 2695 Separations Module

Gradient

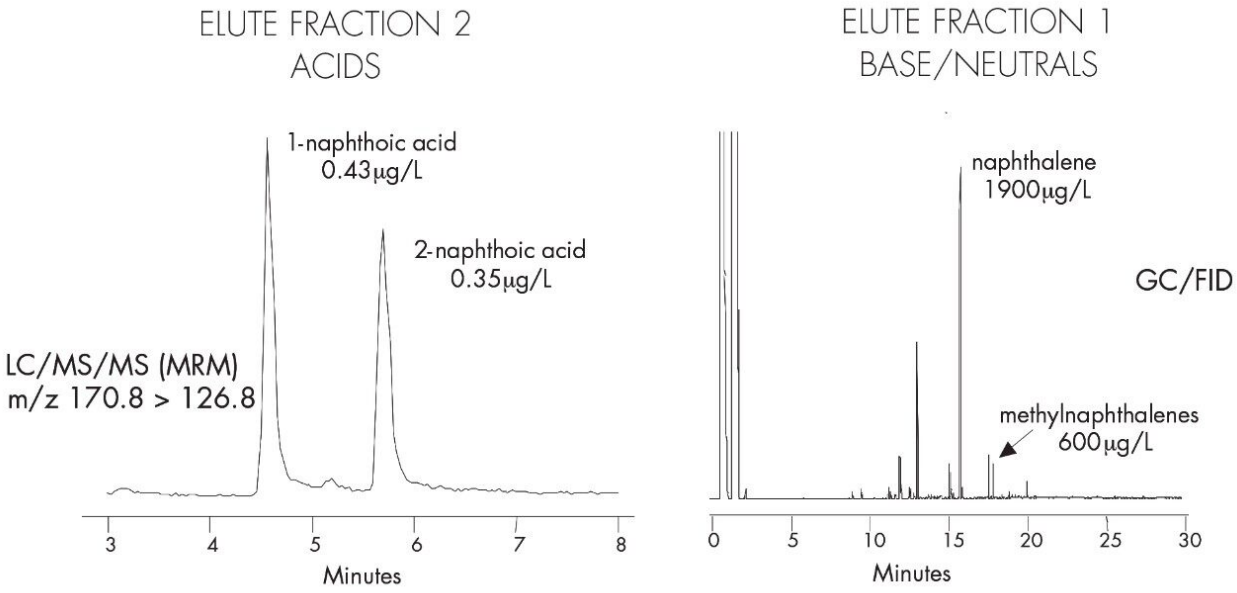
Time (min)	Profile	
	%A	%B
0	75	0
9	40	60
14	40	60
16	10	90

MS Conditions

Instrument:	Quattro Ultima
Ion source:	Negative Electrospray
Mode:	Multiple Reaction Monitoring (MRM)
Source temp.:	150 °C
Desolvation temp.:	450 °C
Cone gas:	50 L/Hr
Dosolvation gas:	500 L/Hr
Collision gas:	Argon



Results and Discussion



Matrix Spike Recoveries (from site water blank)

1- naphthoic acid: 69% (spike level 0.5µg/L)

2- naphthoic acid: 75% (spike level 0.5µg/L)

Naphthalene: 85% (spike level 100µg/L)

Featured Products

Alliance HPLC <https://www.waters.com/514248>

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