



## Naphthoic Acids in Groundwater

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Waters Corporation



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

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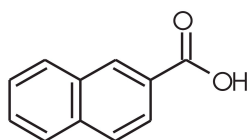
### Abstract

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

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## Introduction

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



2-NAPHTHOIC ACID

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## Experimental

### LC Conditions

Column:	XTerra MS C <sub>18</sub> , 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

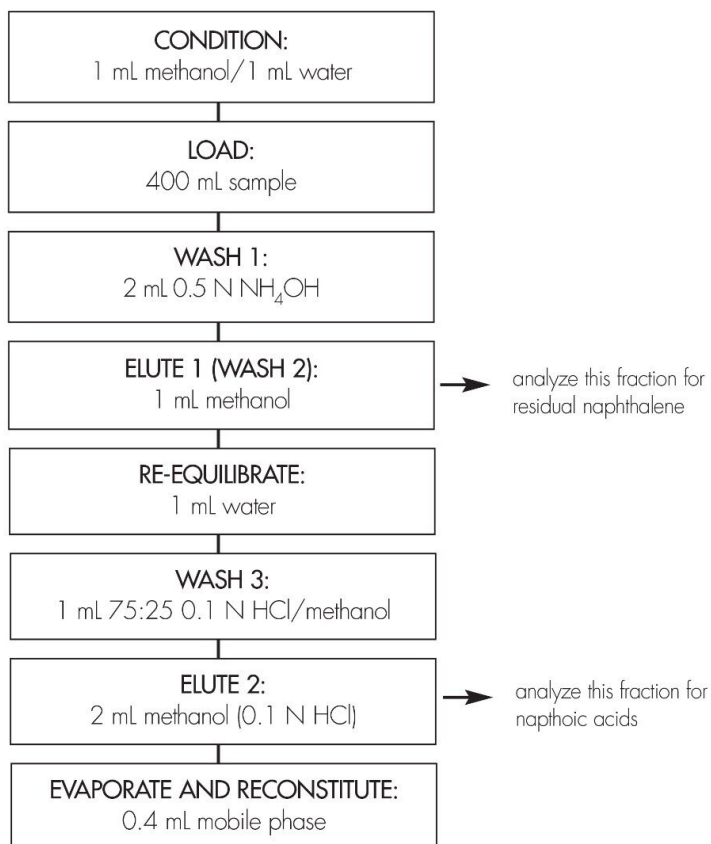
Time (min)	Profile	
	%A	%B
0	75	0
9	40	60
14	40	60
16	10	90

## 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

## OASIS® MAX EXTRACTION METHOD

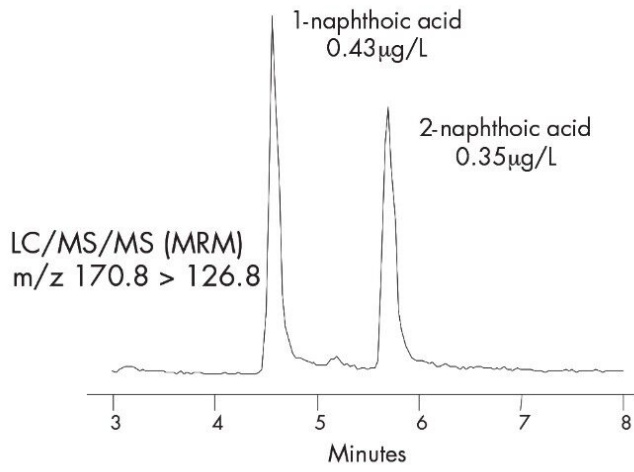
Oasis® MAX Extraction Cartridge, 6 cc/150 mg, 30µm  
Part Number: 196000369



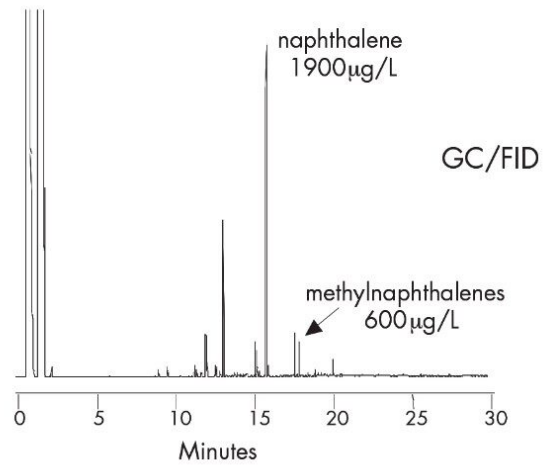
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## Results and Discussion

ELUTE FRACTION 2  
ACIDS



ELUTE FRACTION 1  
BASE/NEUTRALS



### Matrix Spike Recoveries (from site water blank)

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

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

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

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## Featured Products

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

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