Waters™

アプリケーションノート

# Chlordiazepoxide and Metabolites in Serum

Waters Corporation

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

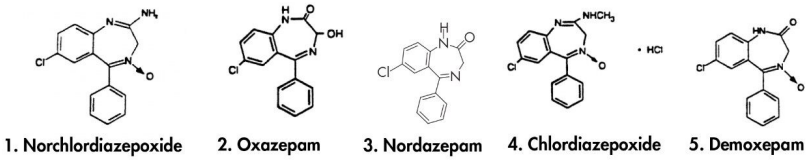
## Abstract

This application brief demonstrates analysis of chlordiazepoxide and metabolites in serum.

## Introduction

The compounds used in this study are –

1. Norchlordiazepoxide
2. Oxazepam
3. Nordazepam
4. Chlordiazepoxide
5. Demoxepam (I.S.)




## Experimental

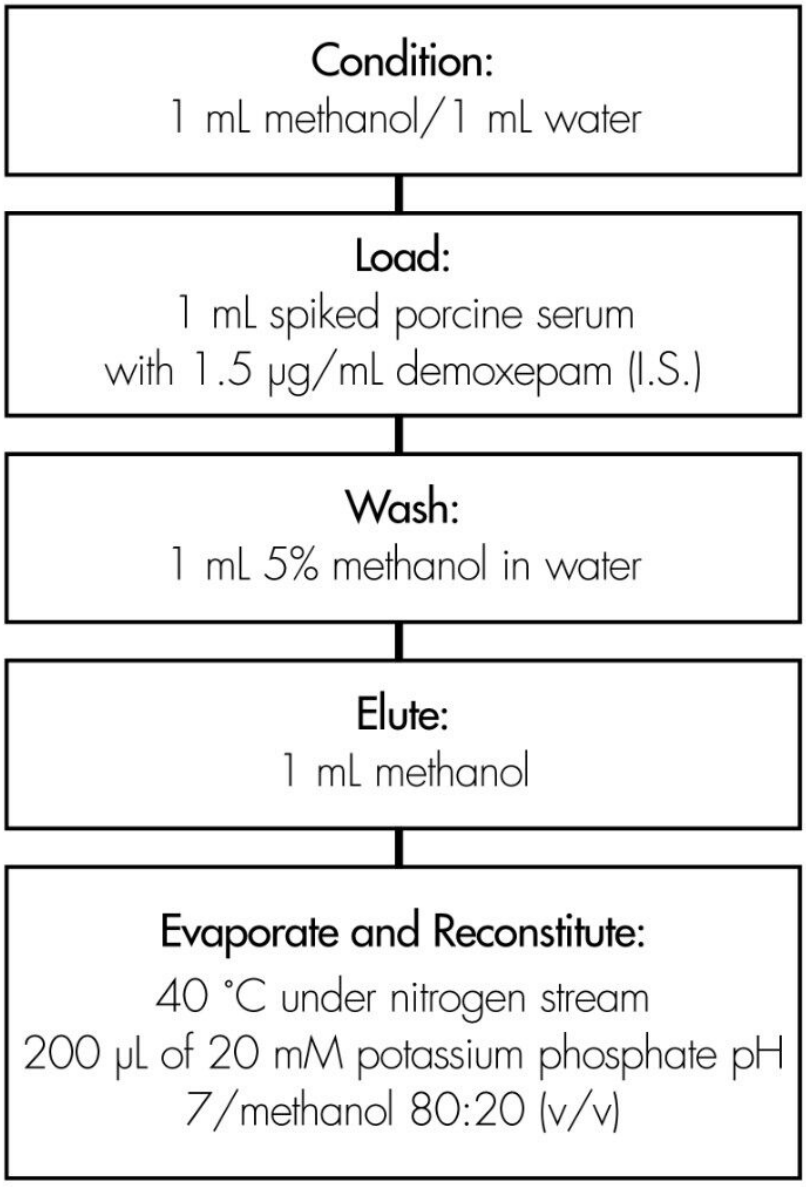
### HPLC Method

| | |
|---|---|
| Column: | Symmetry $C_{18}$, 3.9 x 150 mm, 5 µm |
| Guard column: | Sentry Guard Column, 3.9 x 20 mm, 5 µm |
| Part number: | Column - WAT046980, Guard - WAT054225 |
| Mobile phase: | 20 mM potassium phosphate, pH 7.0/acetonitrile/methanol 56:21:23 |
| Flow rate: | 1.0 mL/min |
| Injection volume: | 20 µL of reconstituted porcine serum extract |

| | |
|---|---|
| Detection: | UV @ 240 nm |

# Oasis® HLB Extraction Method

## Oasis® HLB 1 cc/30 mg Extraction Cartridge
## Part Number WAT094225



## Results and Discussion

| Compound | Concentration µg/mL | % Recovery | %RSD (n-6) |
|---|---|---|---|
| 1. Norchlordiazepoxide | 0.200 | 97.8% | 4.3% |
| | 0.040 | 96.5% | 5.5% |
| 2. Oxazepam | 0.200 | 104.0% | 2.6% |
| | 0.040 | 90.0% | 2.5% |
| 3. Nordazepam | 0.200 | 101.0% | 3.0% |
| | 0.040 | 98.9% | 1.2% |
| 4. Chlordiazepoxide | 0.200 | 90.0% | 2.4% |
| | 0.040 | 100.0% | 4.1% |

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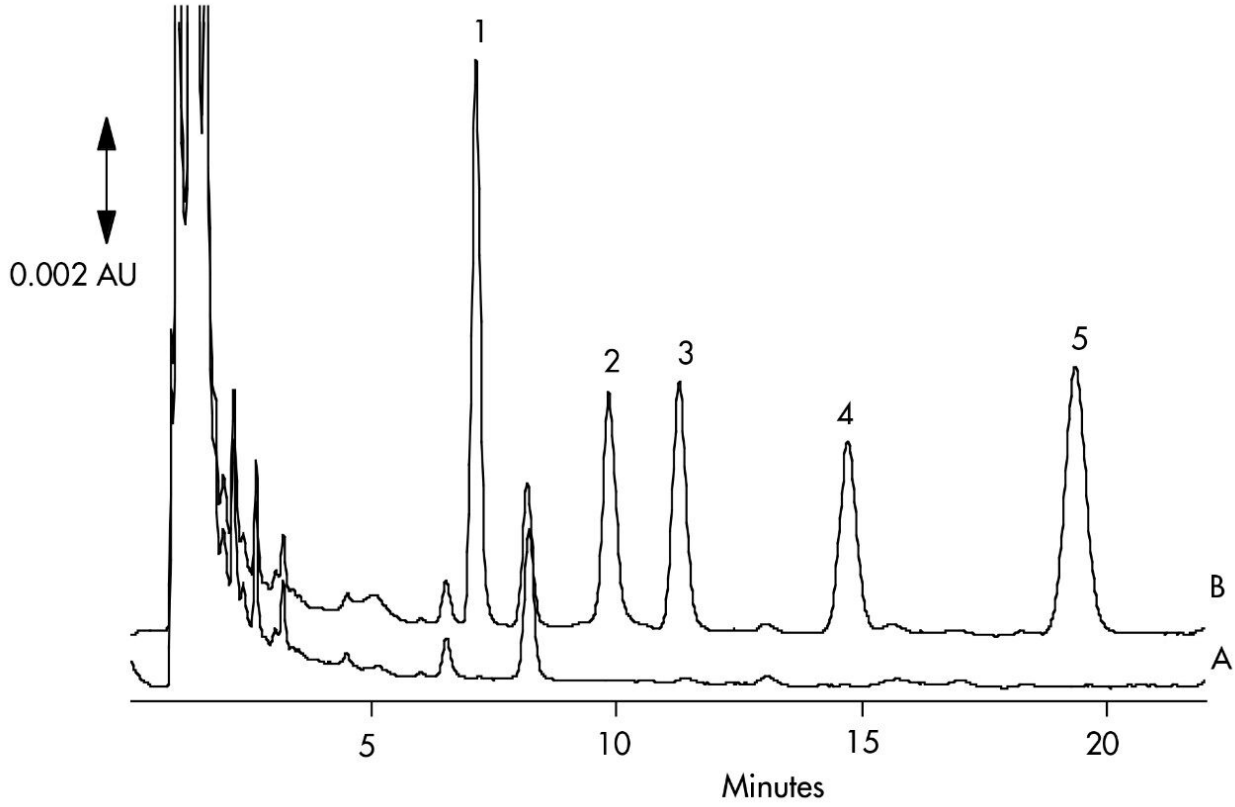
### Chromatogram of Serum Extracts: A) Blank B) Spiked Sample



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WA31763.54, June 2003