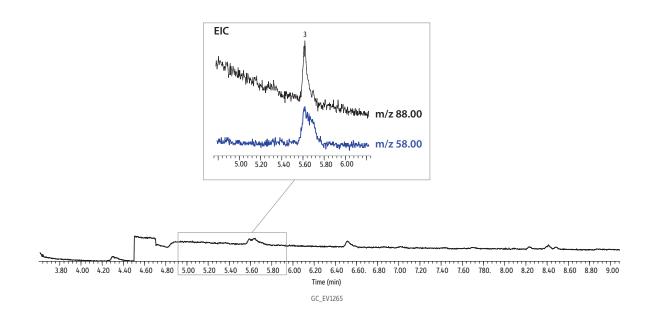
1,4-Dioxane in Drinking Water Extract (10 pg On-Column) on Rxi-624Sil MS (extracted ion chromatogram)



Peaks

- 1. Tetrahydrofuran-d8 (IS)
- 2. 1,4-Dioxane-d8 (SS)
- 3. 1,4-Dioxane

Tetrahydrofuran-d8 (IS) and 1,4-dioxane-d8 (SS) were not detected.

Column Rxi-624Sil MS, 30 m, 0.25 mm ID, 1.40 μ m (cat.# 13868)

using Rxi guard column 5 m, 0.25 mm ID (cat.# 10029) with Universal Press-Tight connectors (cat.# 20429)

Tetrahydrofuran-d8 (cat.# 30112)

Standard/Sample 1,4-Dioxane-d8 (cat.# 30614)

1,4-Dioxane (cat.# 30287)

Dichloromethane

Conc.: Injection Inj. Vol.: 10 pg/µL (IS/SS 10 pg/µL) in extract

1 µL splitless (hold 1 min.)

Premium 4 mm single taper w/wool (cat.# 23303) Liner:

Inj. Temp.: 120°C Purge Flow: 80 ml /min

Oven

Diluent:

Oven Temp: 35 °C (hold 1 min.) to 120 °C at 12 °C/min. (hold 1 min.)

Carrier Gas He, constant flow 1.4 mL/min. Flow Rate: Linear Velocity: 30.556 cm/sec. @ 35 °C

Detector MS

SIM Mode: SIM Program:

Start Time Group (min.) Dwell (ms) 3.6 4.5 46.78.80 m/z 50 96,88,64,62,58 m/z 40

Transfer Line Temp.: 280 °C Quadrupole 230 °C Analyzer Type: Source Temp.: Quad Temp.: 150 °C Solvent Delay Time: 5.0 min. BFB Tune Type: Ionization Mode:

Agilent 7890A GC & 5975C MSD Instrument

A drinking water sample fortified with 1,4-dioxane and surrogate standard was extracted using a Resprep activated coconut charcoal SPE cartridge (cat.# 26032) following EPA Method 522 protocol. Immediately after solvent elution, the extract was spiked with internal standard and Sample Preparation

brought up to final volume. The extract was then dried with anhydrous magnesium sulfate (this

was a deviation from the method, which calls for sodium sulfate).

