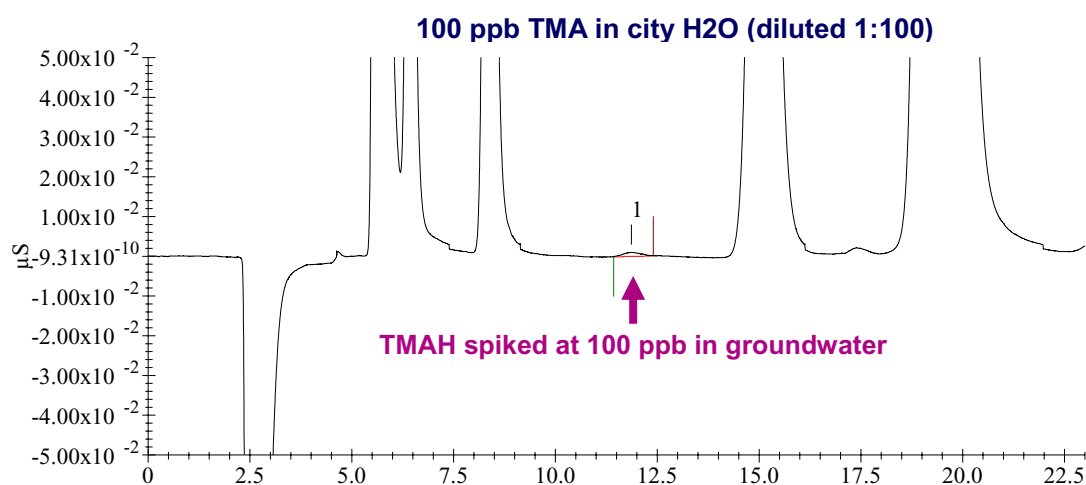


Testing for TMAH in Water

TMAH (Tetramethyl ammonium hydroxide) is an organic amine used by the semiconductor industry in a wide number of applications, including photolithography development, wafer cleaning, silica etching, and in CMP slurries. TMAH is widely used because it provides a basic pH solution with no mobile ions, such as Na^+ or K^+ . TMAH is also available in high purity semiconductor grade, with low metallic and anionic contamination.

As such, TMAH can wind up in water post process, causing potential areas of concern in reclaim, reuse, wastewater, and groundwater. Balazs has developed analytical methodology that allows for testing TMAH in different grades of water from ppt to ppm concentrations.



Aqueous samples are collected into bottles and shipped overnight to our Fremont laboratory. Using chromatography, Balazs can identify TMAH from common potentially interfering cations including sodium, ammonium, magnesium and calcium and all other amines including trimethylamine.

Using this procedure, Balazs clients have:

- Characterized TOC in waste streams for reclaim/reuse
- Optimized Membrane Biological Reactor (MBR) waste reduction systems
- Detected improper tool hookups that unknowingly discharged TMAH
- Demonstrated that local groundwater is not contaminated with TMAH

For additional information, please contact [us](#).