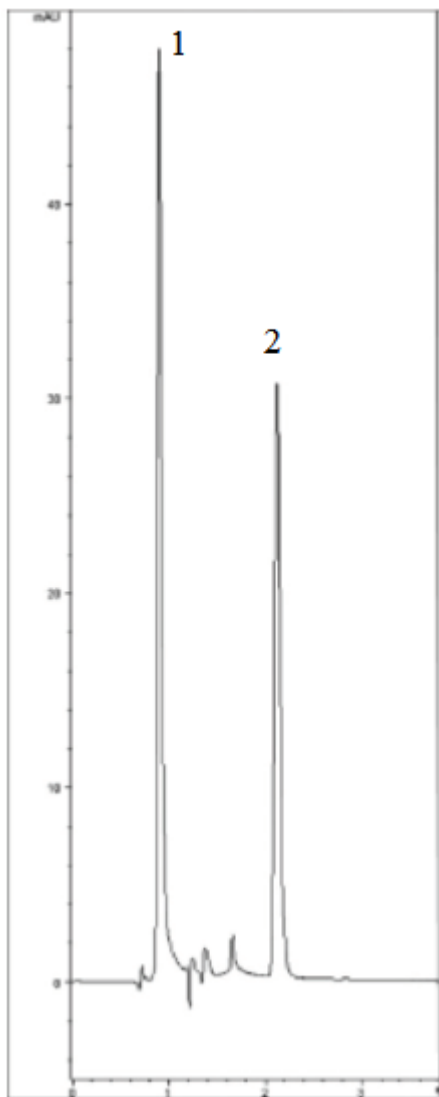


## EDTA Analysis with HPLC – AppNote

**EDTA does not have a significant Chromophore**, so to achieve UV Detection, in the Method shown below we used a pre-Column reaction of a Solution of Ferric Chloride with the Sample. The resulting EDTA/Fe<sup>3+</sup> has significant UV Absorbance making this a very Sensitive Method.

Ethylenediaminetetraacetic acid is extremely difficult to analyze by itself however in its complexed form, it chromatographs well from matrices such as river sediment and other solutions.



### Peaks:

1. Water (solvent front)
2. EDTA Fe<sup>3+</sup>



### Method Conditions:

**Column:** Cogent HPS C8™, 5µm, 120Å

**Catalog No.:** [75008-15P](#)

**Dimensions:** 4.6 x 150mm

**Mobile Phase:** 98:2 DI H<sub>2</sub>O/ Acetonitrile with 0.1% Acetic Acid (pH 3.5/2g/L Tetrabutylammonium Sulfate)

**Temperature:** 40°C

**LOQ:** 0.2µg / mL

**Injection vol.:** 20µL

**Flow rate:** 2mL / minute

**Note:** EDTA is a synthetic metal complexing reagent that is used in a wide variety of industrial applications. Used as a preservative, it has very low biodegradability thus remains in the environment for long periods of time. Found in sewer water, freshwater and ground water, it re-solubilizes precipitated toxic metals back into solution where they can be ingested by plants and animals.



## Attachment

**A74. EDTA Analysis with HPLC pdf** 8.7 Kb [Download File](#)

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