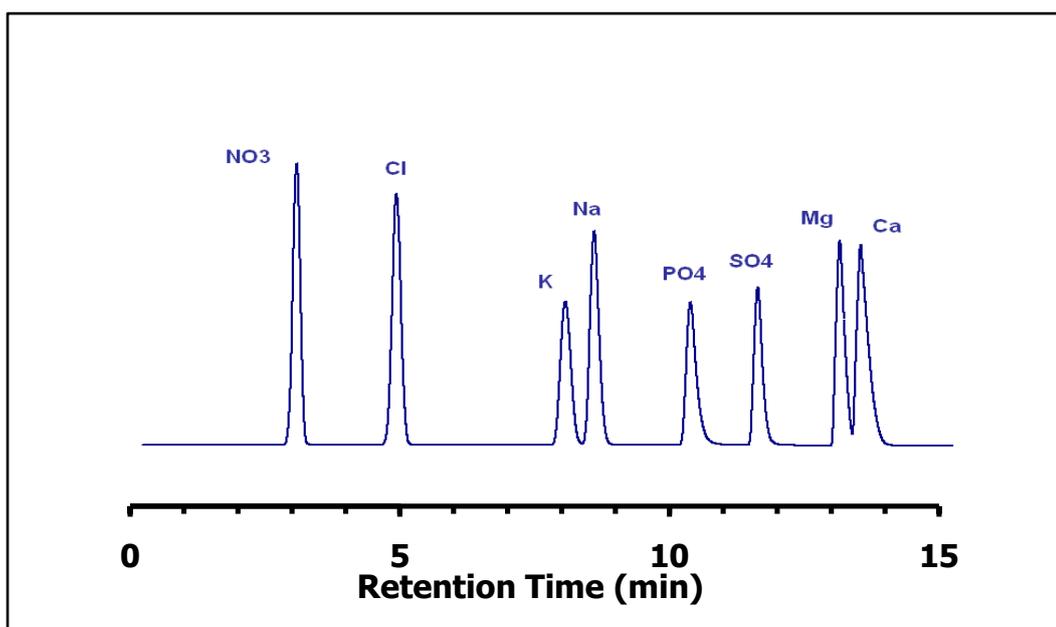


## ZIC®-HILIC Simultaneous Separation of Anions and Cations

### Chromatographic Conditions

Column: ZIC®-HILIC, PEEK 150 x 2.1 mm, 3.5 µm, 200 Å (cat. no. 150448)  
 Injection: 2 µL diluted in mobile phase  
 Detection: SEDEX 85LT, 40°C, 3.5 bar  
 Column Temperature: 40°C  
 Flow Rate: 0.3 mL/min  
 Mobile Phase (v/v): A: Acetonitrile  
                           B: 20mM Ammonium Formate, pH3  
 Gradient: 0-3 min; 80% A, 3-10 min from 80 to 20% A, 10-13 min 20% A  
             13-15 min 20-80%A followed by 10 min re-equilibrium at initial.



### Chromatographic Data

No.	Compound		Time (min)	LOD based on S/N=3
1	Nitrate	NO <sub>3</sub>	2,9	2.6 mg/L
2	Chloride	Cl <sup>-</sup>	4,7	2.3 mg/L
3	Potassium	K <sup>+</sup>	7,8	5.1 mg/L
4	Sodium	Na <sup>+</sup>	8,4	0.9 mg/L
5	Phosphate	PO <sub>4</sub> <sup>3-</sup>	10,1	15.8 mg/L
6	Sulfate	SO <sub>4</sub> <sup>2-</sup>	11,4	2.4 mg/L
7	Magnesium	Mg <sup>2+</sup>	12,9	0.3 mg/L
8	Calcium	Ca <sup>2+</sup>	13,3	0.7 mg/L

Rt ranged between 0.03-0.10 % RSD, while Peak Area ranged between 1.2-4.0 % RSD (n=10)

Data provided by Eric Verette, SEDERE S.A.S, France.