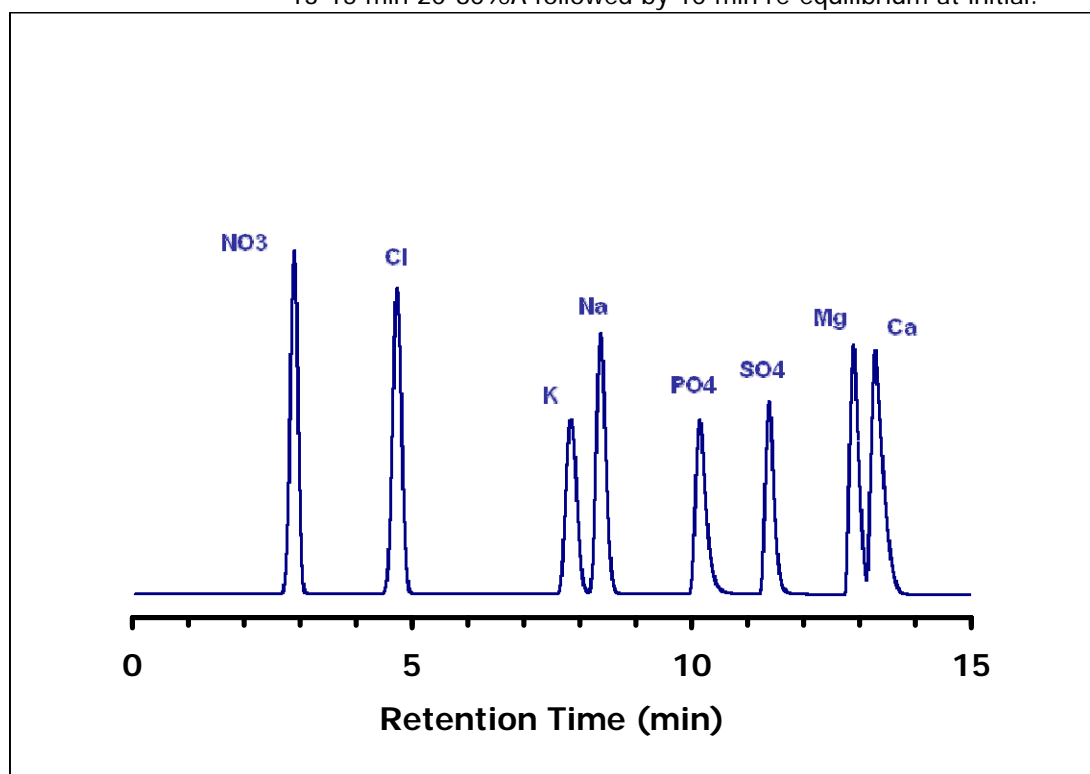


ZIC®-HILIC Simultaneous Separation of Anions and Cations

Chromatographic Conditions

Column: ZIC®-HILIC, PEEK 150 x 2.1 mm, 3.5 µm, 200 Å (P/N 1.50448.0001)
 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 ₃	2,9	2.6 mg/ml
2	Chloride	Cl ⁻	4,7	2.3 mg/ml
3	Potassium	K ⁺	7,8	5.1 mg/ml
4	Sodium	Na ⁺	8,4	0.9 mg/ml
5	Phosphate	PO ₄ ³⁻	10,1	15.8 mg/ml
6	Sulfate	SO ₄ ²⁻	11,4	2.4 mg/ml
7	Magnesium	Mg ²⁺	12,9	0.3 mg/ml
8	Calcium	Ca ²⁺	13,3	0.7 mg/ml

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.