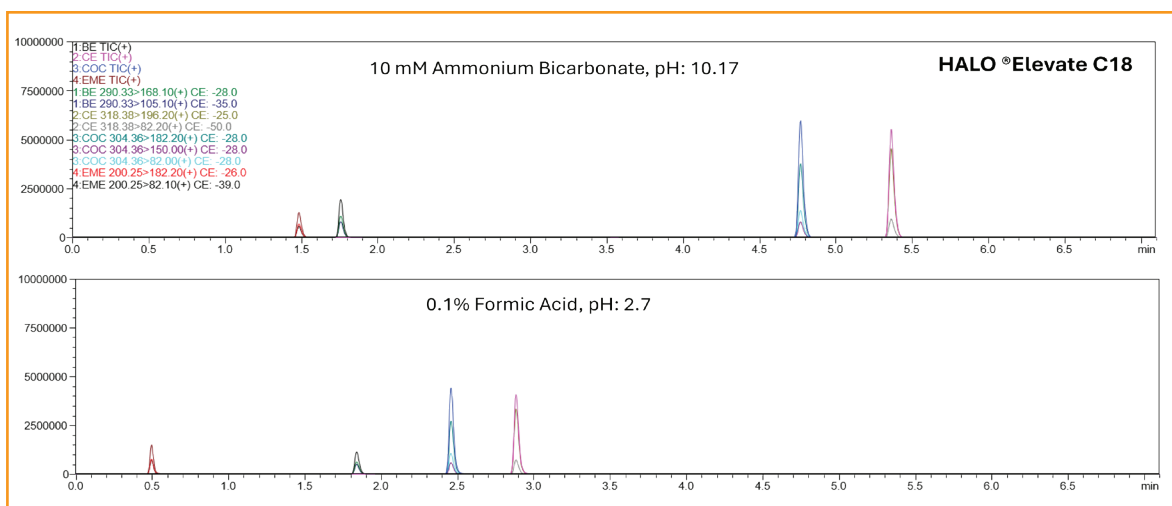
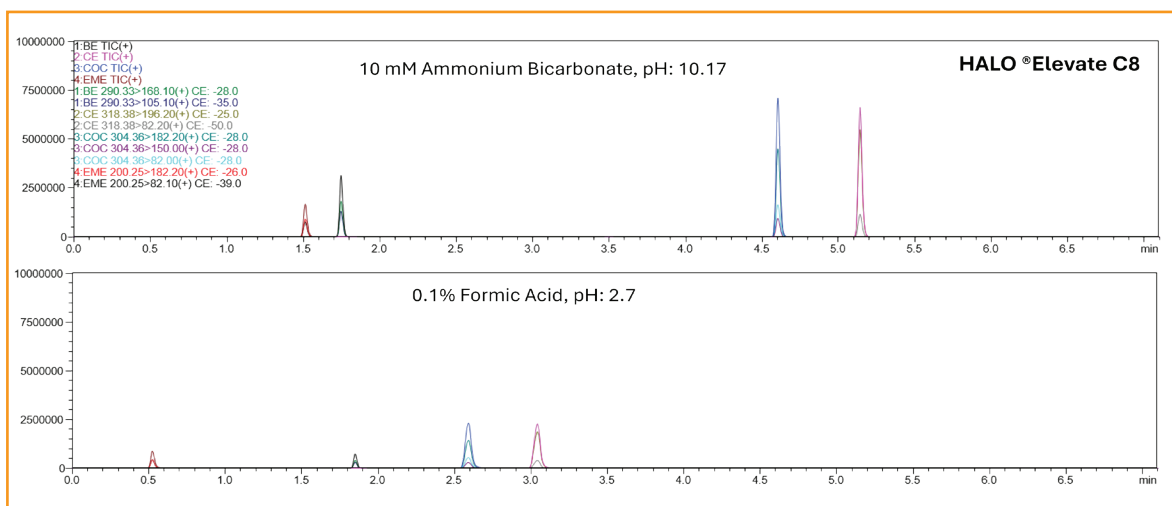
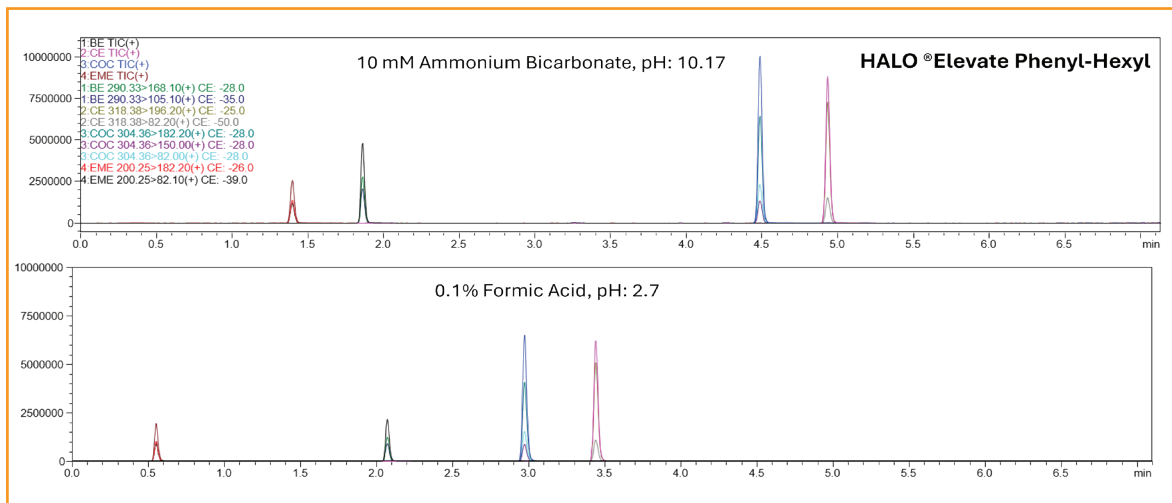




The HALO® ELEVATE Advantage for High pH Analysis on Cocaine Metabolites

435



**TEST CONDITIONS:**

Column: HALO 120 Å ELV C18, 2.7 µm, 2.1 x 100 mm

HALO 120 Å ELV C8, 2.7 µm, 2.1 x 100 mm

HALO 120 Å ELV Phenyl-Hexyl, 2.7 µm, 2.1 x 100 mm

Part Numbers: 92272-602

92272-608

92272-606

Mobile Phase A: see below

Mobile Phase B: Acetonitrile

Gradient:	Time	%B
	0.0	10
	7.0	80

Flow Rate: 0.4 mL/min.

Back Pressure: 265 bar

Temperature: 30 °C

Injection Volume: 0.1 µL

Sample Solvent: 10/90 ACN/ Water

Detection: LC/MS/MS

LC/MS System: Shimadzu 8060 NX

PEAK IDENTITIES:

1. Benzoylecgonine (290.33>168.10, 105.10)
2. Cocaethylene (318.38>196.20,82.20)
3. Cocaine (304.36>182.20,150,82)
4. Ecgonine Methyl Ester (200.25>182.20, 82.10)

All three HALO® phases are demonstrating improved peak shape at high pH. Low pH/acidic mobile phases are typically used to separate cocaine (base) and its metabolites because cocaine is protonated and leads to high ionization/ sensitivity in ESI(+). High pH mobile phase/basic mobile phases tend to lead to better chromatography for basic analytes, leading to increased retention and improved peak shape. For optimal results adjust the mobile phase pH to be above at least 1 pka unit when analyzing basic compounds under high pH conditions.

