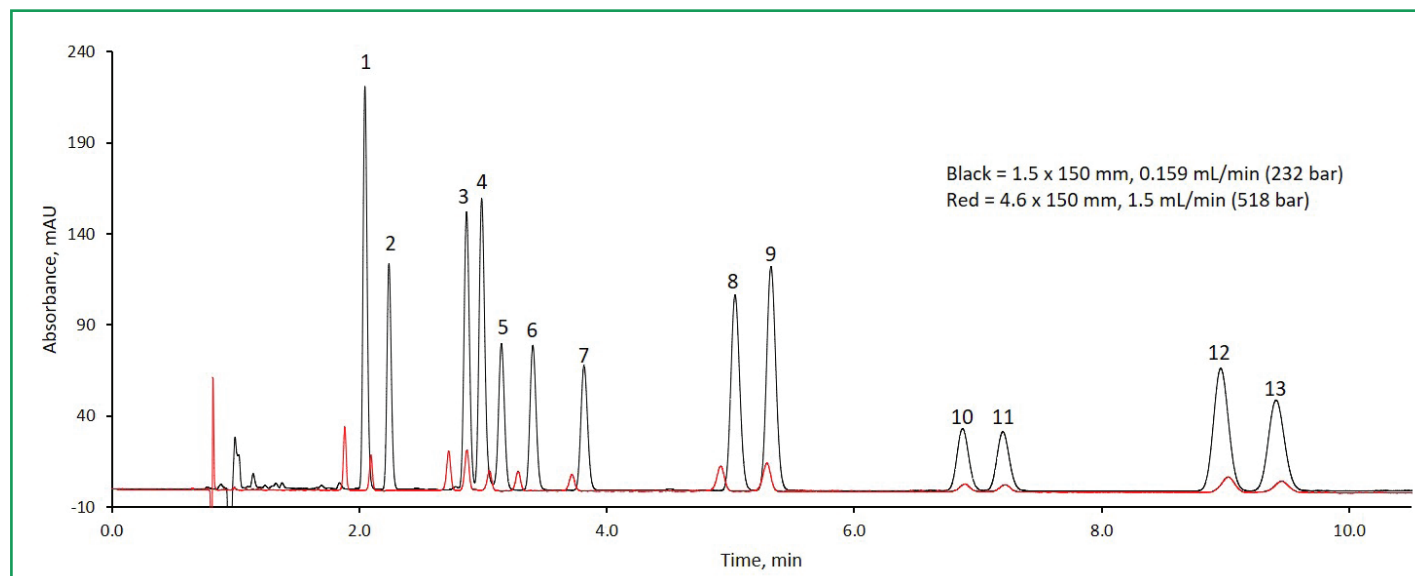




## Sensitivity and Solvent Savings using a 1.5 mm ID Column with Cannabinoids

283-CN



### PEAK IDENTITIES

- |          |          |           |          |
|----------|----------|-----------|----------|
| 1. CBDVA | 5. CBG   | 9. CBN    | 13. THCA |
| 2. CBDV  | 6. CBD   | 10. 9-THC |          |
| 3. CBDA  | 7. THCV  | 11. 8-THC |          |
| 4. CBGA  | 8. THCVA | 12. CBC   |          |

### TEST CONDITIONS:

**Column:** HALO 90 Å C18, 2.7 µm, 1.5 x 150 mm

**Part Number:** 9281X-702

**Column:** HALO 90 Å C18, 2.7 µm, 4.6 x 150mm

**Mobile Phase A:** Water/ 0.1% Formic Acid

**Mobile Phase B:** Acetonitrile/ 0.1% Formic Acid

**Isocratic:** 75% B

**Flow Rate:** 0.159 mL/min (1.5x150)

**Flow Rate:** 1.5 mL/min (4.6x150)

**Temperature:** 30 °C

**Detection:** UV 228 nm, PDA

**Injection Volume:** 0.5 µL

**Sample Solvent:** 75/25 ACN/ Water

**Data Rate:** 100 Hz

**Response Time:** 0.025 sec.

**Flow Cell:** 1 µL

**LC System:** Shimadzu Nexera X2

A separation of cannabinoids is performed on a HALO 90 Å C18 column. Switching from a 4.6 mm ID to a 1.5 mm ID column diameter increases overall sensitivity along with significantly reducing solvent consumption. The extra column volume has been reduced by optimizing the pre/post-column tubing as well as the flow cell. This makes the 1.5 mm ID column an ideal candidate for increased sensitivity without the investment into a specialized low flow HPLC system.

