

NOTE NO. 18 - January 27 1987

## INJECTION OF WHOLE HUMAN BLOOD USING AN ISRP GLASS BEAD SAMPLE LOOP

**Analytes:** Phenobarbital (6.4  $\mu\text{g/ml}$ ), Carbamazepine (2.4  $\mu\text{g/ml}$ )

**Sample Matrix:** Whole human blood diluted

**Sample Size:** Injecting 1 milliliter with water (1:25)

**Column:** Sample loop: 75 micron GFF glass bead ISRP, 1 cm x 3.0 mm ID

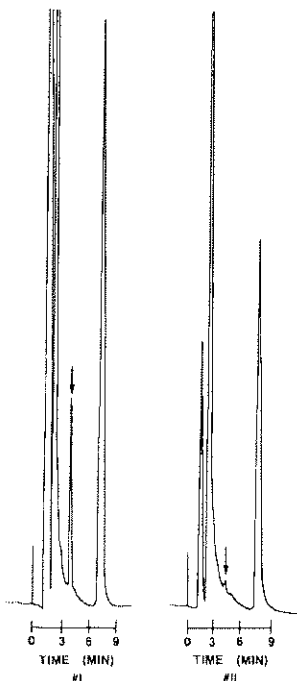
**Analytical column:** 5 micron GFF ISRP, 15 cm x 4.6 mm ID

**Regis Product Number:** 731451

**Mobile Phase:** 80% 0.1 M  $\text{KH}_2\text{PO}_4$  (pH 6.8), 20% Acetonitrile  
(HPLC grade reagents)

**Procedure:** See Application Note No.18b

**Results:** Chromatograms I and II were obtained under identical conditions. However, after the loading of the sample onto the ISRP glass bead column in preparation for chromatogram II, the sample was washed with 1 ml of water. Chromatogram II shows that the phenobarbital was not well retained and was washed off the glass beads. However, the carbamazepine was retained and eluted onto the ISRP analytical column. (Chromatogram II shows also that the wash decreased the amount of blood components.)



**Detection:** 254 nm, 0.05 AUFS

**Flow Rate:** 1.0 ml/min

**Note:** Sample filtered through 0.2  $\mu\text{m}$  membrane prior to direct injection