



- 4.5 Type of flame: Oxidizing
- 5.0 Analysis Procedure
  - 5.1 For the analysis procedure and the calculation. see "Direct Aspiration", part 9.1 of the Atomic Absorption Methods section of this manual.
- 6.0 Notes
  - 6.1 The 330.2 nm resonance line of sodium, which has a relative sensitivity of 185, provides a convenient way to avoid the need to dilute more concentrated solutions of sodium.
  - 6.2 Low-temperature flames increase sensitivity by reducing the extent of ionization of this easily ionized metal. Ionization may also be controlled by adding potassium (1000 mg/L) to both standards and samples.
  - 6.3 Data to be entered into STORET must be reported as mg/L .
  - 6.4 The flame photometric method may also be used (Standard Methods, 14th Edition, p. 250).
- 7.0 Precision and Accuracy
  - 7.1 In a single laboratory (EMSL), using distilled water samples spiked at levels of 8.2 and 52 mg Na/L, the standard deviations were  $\pm 0.1$  and  $\pm 0.8$ , respectively. Recoveries at these levels were 102% and 100%.